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INTERSTATE MIGRATION AND INTERVENING OPPORTUNITIES

MARGARET L. BRIGHT and DOROTHY S. THOMAS
University of California

IN THE December, 1940, issue of this journal, Stouffer¹ formulates "a conceptual framework for attacking the problem of distance" in connection with migration. This formulation may be summarized briefly as follows: Taking as a starting point the oft-repeated observation that most people migrate short distances, few migrate long distances, but that there are many exceptions to this generalization, Stouffer's theory

assumes that there is no necessary relationship between mobility and distance. Instead, it introduces the concept of *intervening opportunities*. It proposes that *the number of persons going a given distance is directly proportional to the number of opportunities at that distance and inversely proportional to the number of intervening opportunities*. . . . The relation between mobility and distance may be said to depend on an auxiliary relationship, which expresses the cumulated (intervening) opportunities as a function of distance.²

The theory is formulated with mathematical precision and thus lends itself to verification provided working definitions of opportunities can be set up and data conforming to these definitions be obtained. Unfortunately, data directly suitable for verification are not available, nor were they available to Stouffer who had to content himself with an analysis of persons moving from one district to another in the Cleveland metropolitan area and he had to define opportunities in terms of available dwellings of specified rentals. His empirical test showed "encouraging" conformity between the pattern of expectation and observation, although he is careful to point out that "many of the discrepancies are too large to attribute to chance."³

In our opinion, one of the most useful aspects of Stouffer's theory is its applicability to the determination of spatial patterning and its value particularly in throwing light on the nature and direction of specific departures from the observed general patterning. To this end, we have analyzed the

¹ Samuel A. Stouffer, "Intervening Opportunities: A Theory Relating Mobility and Distance," *Amer. Sociol. Rev.*, 1940, 5: 845-867. ² *Ibid.*, 846-847. ³ *Ibid.*, 849.

TABLE 1. INTERSTATE MIGRANTS COMPARED WITH THOSE EXPECTED ACCORDING TO STOUTER'S THEORY, BY DISTANCE INTERVALS, UNITED STATES AND REGIONS, INCLUDING AND OMITTING CALIFORNIA, 1930

Distance in Miles	United States						Northeast				Southeast			
	Including Calif.			Omitting Calif.			Including Calif.		Omitting Calif.		Including Calif.		Omitting Calif.	
	Observed	Expected	(2)	Observed	Expected	(3)	Observed	Expected	(6)	Observed	Expected	(9)	Observed	Expected
	(1)	(2)	(2)	(3)	(4)	(3)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
0	1,411	2,183	1,411	1,411	2,000	1,411	1,130	1,421	1,130	1,339	—	—	—	—
100	4,585	6,378	4,585	4,585	6,027	1,951	1,951	1,829	1,951	1,747	1,617	2,419	1,617	2,396
200	5,215	5,244	5,188	5,188	4,680	816	816	548	816	525	1,334	1,093	1,334	1,072
300-	2,669	2,456	2,669	2,669	2,275	204	204	333	204	338	1,384	1,157	1,384	1,141
400-	1,818	1,916	1,818	1,818	1,754	367	367	333	367	314	543	511	543	504
500-	1,890	1,788	1,773	1,773	1,582	153	153	225	153	216	678	621	678	616
600-	1,340	1,123	1,226	1,226	982	177	177	202	177	192	532	345	532	340
700-	801	819	776	776	723	74	74	121	74	114	341	277	341	274
800-	786	698	660	660	618	129	129	144	129	139	130	144	130	144
900-	458	518	428	428	477	103	103	124	103	118	100	125	100	126
1,000-	480	477	480	480	440	114	114	149	114	139	66	93	66	92
1,100-	203	203	203	203	186	37	37	54	37	50	34	39	34	39
1,200-	470	395	224	224	237	65	65	114	65	107	17	29	17	29
1,300-	408	154	190	190	100	14	14	42	14	36	7	12	7	10
1,400-	365	156	206	206	113	38	38	44	38	42	24	22	24	22
1,500-	543	169	215	215	100	28	28	32	28	31	55	30	10	13
1,600-	126	67	126	126	60	9	9	14	9	14	1	4	1	4
1,700-	444	142	84	84	54	23	23	22	23	23	59	33	20	14
1,800-	245	85	107	107	34	5	5	3	5	3	42	23	3	4
1,900-	226	119	83	83	58	14	14	11	14	11	97	70	37	30
2,000-	182	78	30	30	25	9	9	8	9	8	20	24	3	7
2,100-	21	21	7	7	9	18	18	13	9	4	2	4	2	4
2,200-	104	100	64	64	51	43	43	30	43	28	53	61	16	18
2,300-	201	92	50	50	30	171	171	79	40	22	3	3	3	3
2,400-	206	65	27	27	17	197	197	57	22	12	1	1	1	1
2,500-	31	13	6	6	4	29	29	12	5	3	—	—	—	—
2,600-	74	17	—*	—*	—	69	69	16	—	—	—	—	—	—
2,700-	19	5	—	—	—	18	18	5	—	—	—	—	—	—
Total	25,391	25,391	22,636	22,636	22,636	6,005	6,005	6,005	5,575	5,575	7,140	7,140	6,903	6,903

* Less than 500 migrants.

TABLE 1. (Continued)

Thousands of migrants

INTERSTATE MIGRATION

775

TABLE 1. (Continued)

Distance in Miles	Thousands of migrants											
	Northwest, Southwest, and Far West				Middle States—Total				Middle States— Eastward		Middle States—Westward	
	Including Calif.		Omitting Calif.		Including Calif.		Omitting Calif.		Observed		Including Calif.	
	Observed	Expected	Observed	Expected	Observed	Expected	Observed	Expected	Observed	Expected	Observed	Expected
0-	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
100-	107	282	107	239	174	480	174	422	—	—	174	424
200-	127	230	127	175	890	1,900	890	1,709	417	652	474	630
300-	912	1,181	885	929	2,153	2,422	2,153	2,154	1,009	854	1,144	1,785
400-	429	436	429	339	652	510	652	457	241	252	416	371
500	278	310	278	255	630	762	630	681	308	303	311	445
600-	468	394	351	265	591	548	591	485	236	207	366	366
700-	240	229	140	140	391	347	391	310	149	135	241	236
800-	187	177	102	116	259	244	259	219	98	79	141	161
900-	271	173	145	124	256	237	256	211	91	182	182	162
1,000-	124	124	94	104	131	145	131	129	74	61	56	61
1,100-	128	122	128	108	172	113	172	101	45	36	129	86
1,200-	48	66	48	59	84	44	84	38	5	7	77	60
1,300-	341	135	95	78	47	27	47	23	7	7	40	32
1,400-	261	82	43	38	126	18	126	16	—	—	126	43
1,500-	40	36	38	29	263	54	106	20	—	—	263	116
1,600-	29	27	39	38	413	61	138	18	—	—	413	145
1,700-	21	21	29	23	87	22	87	19	—	—	87	42
1,800-	13	15	9	11	341	66	32	6	—	—	340	107
1,900-	15	17	8	10	185	44	89	17	—	—	185	63
2,000-	8	11	3*	5	145	35	15	5	—	—	145	47
2,100-	1	4	—	1	—	—	—	—	—	—	—	—
2,200-	8	9	5	5	—	—	—	—	—	—	—	—
2,300-	27	10	7	5	—	—	—	—	—	—	—	—
2,400-	8	7	4	4	—	—	—	—	—	—	—	—
2,500-	2	1	1	1	—	—	—	—	—	—	—	—
2,600-	5	1*	—	—	—	—	—	—	—	—	—	—
2,700-	1	—	—	—	—	—	—	—	—	—	—	—
Total	4,146	4,146	3,111	3,111	8,100	8,100	7,047	7,047	2,680	2,680	5,420	5,420
											4,367	4,367

* Less than 500 migrants.

* Less than 500 migrants.

statistics on state-of-birth in terms of state-of-residence as presented in the 1930 population census, our aim being to determine the extent to which movement from the state-of-birth has followed a pattern conforming in general to Stouffer's theory of intervening opportunities and to analyze in some detail the deviational routes which have been developed.

We recognize the limitations of the data at our disposal. Although they certainly tell part of the story of the great waves of internal migration within this country, much of the real story is lost in these data and part of the apparent story actually may be misleading. They tell nothing of the time at which the migrations occurred except that they occurred sometime prior to 1930. They underestimate the amount of interstate migration, both because many of the earlier migrants have died and because the effect of an appreciable outmigration may be lost due to compensating return migration to the place of birth. To the extent that migration has taken place in stages and not directly from birthplace to residence in 1930, they may even give a misleading impression of the actual routes of migration. We have used these data, partly, because no better data were available, and also because, in spite of these defects, it still seems that the application of Stouffer's technique may reveal some of the underlying factors involved in interstate migration to a greater extent than has been possible with the cruder analyses of these same data that have so frequently appeared in the literature.

Applying Stouffer's terminology to these data, we took as our working definition of *opportunities* the actual number of persons born in other states who were residing in a given state. We cannot specify exactly what these opportunities were. We can merely say that they were the kind that attracted people across state lines. We define *intervening opportunities* similarly as the cumulated number of native-born persons settling in all states between the state-of-origin and state-of-destination. *Distance* was measured, in 100 mile intervals, between the center of population in 1920 (as defined in the *Statistical Atlas of the United States, 1924*)⁴ of each state (and the District of Columbia) and every other state. To simplify the arithmetic, migration data were expressed in thousands. *Expected migrants* are the number of natives of a given state-of-destination who would be found living in the state under consideration, after applying Stouffer's formula⁵ to the data defined as *opportunities* and *intervening opportunities*. *Observed migrants* are the actual number of natives of a given state-of-origin living in a given state-of-destination. Thus, opportunities and intervening opportuni-

⁴ Center of population was not determined by states in 1930. However, 1920 is a satisfactory date since it is probably closer to the modal time of migration than 1930.

⁵ That is, $\frac{\Delta y}{\Delta s} = \frac{a}{x} \times \frac{\Delta x}{\Delta s}$ where Δy = number of persons moving from an origin to a circular band of width Δs ; where x = the number of intervening opportunities; where Δx = the number of opportunities within the band of width Δs .

ties are in terms of outmigrants from all states combined to a given state and the resultant expected migrants are based on the assumption that in-migrants to the given state will be in proportion. The reader is referred to Stouffer's article for a detailed description of the technique of analysis.⁶ Observed and expected migrants were summarized by distance, by regions (Odum's classification),⁷ and finally for the United States as a whole.

Table 1 (cols. 1 and 2) and Chart 1 (left-hand panel) show the distribution of the 25 million interstate migrants. Whereas the *pattern* of correspondence of observed with expected might be considered "encouraging" no statistical test is needed to indicate that the discrepancies are far greater than could be attributed to chance. These discrepancies are of two sorts: (1) the expected number is greatly in excess of the observed in the first two distance intervals; and (2) the observed exceeds the expected appreciably in the range from 1200 to 2000 miles and again from 2400 to 2700 miles.

We believe that the first of these two discrepancies is due to two factors. In the first place, our measurements were very crude. Since we had no information about the precise origin of the migrants, we had to assume that

⁶ Our application of the technique may be illustrated by an example: There were 5 states lying between 100 and 200 miles from Pennsylvania, 4 between 200 and 300 miles, 5 between 300 and 400 miles, and so on. The states in the first distance interval had, together, 3082.4 (thousand) residents who were born in other states; those in the next interval had 2345.5; and those in the third interval, 1103.3. These, then, represented gross opportunities for migrants, or using Stouffer's symbols, Δx . Cumulating these ($\Sigma \Delta x$) gives gross intervening opportunities, namely, 3082.4 for the first interval, 5427.9 for the second, 6531.2 for the third. x is obtained by straight-line interpolation, that is, 1541.2, 4255.15, and 5979.55 respectively. $\Delta x/x$ ($\times 100$) gives fictitious "expected" numbers of 200, 55, and 18 respectively, which when summed over the whole range of distance intervals (that is, through 2300, the farthest interval) amount to 405. This number is then raised to the actual number of Pennsylvanians living in other than the state-of-birth, or 1715, and each $\Delta x/x$ ($\times 100$) is corrected to this total, that is, 847 in the first interval, 233 in the second, and 76 in the third. This is the expected pattern of migration from Pennsylvania. Actual numbers leaving Pennsylvania are then summed for states in each interval, giving an observed figure of 709 for the first, 376 for the second, and 35 for the third interval. The corrected total expected for each interval is distributed among the several states in the interval, according to the proportion gross opportunities in each bears to the total gross opportunities in that interval (Δx); for example, Delaware in the first interval had 65.5 (thousand) in-migrants. This represented 2.1 percent of Δx for this interval. Since 847 migrants were expected for the whole interval, Delaware's share from Pennsylvania was 2.1 percent of 847 or 18. Observed migrants from Pennsylvania to Delaware were 19, and so on for each state.

⁷ *Northeast* includes the New England and Middle Atlantic States, and Delaware, Maryland, West Virginia, and the District of Columbia from the South Atlantic group; *Southeast*, the remainder of the South Atlantic States, all of the East South Central, and Arkansas and Louisiana from the West South Central group; *Southwest*, the remainder of the West South Central states and New Mexico and Arizona from the Mountain group; *Northwest*, all of the remainder of the Mountain group except Nevada, and North Dakota, South Dakota, Nebraska, and Kansas from the West North Central group; *Middle states*, the remainder of the West North Central group and all of the East North Central states; *Far West*, the Pacific states and Nevada.

Because of their small outmigration, we combined the Northwest, Southwest, and Far West.

CHART 1. NUMBER OF INTERSTATE MIGRANTS, UNITED STATES, 1930, BY INTERVALS OF DISTANCE, COMPARED WITH NUMBER EXPECTED, ACCORDING TO STOUFFER'S THEORY.

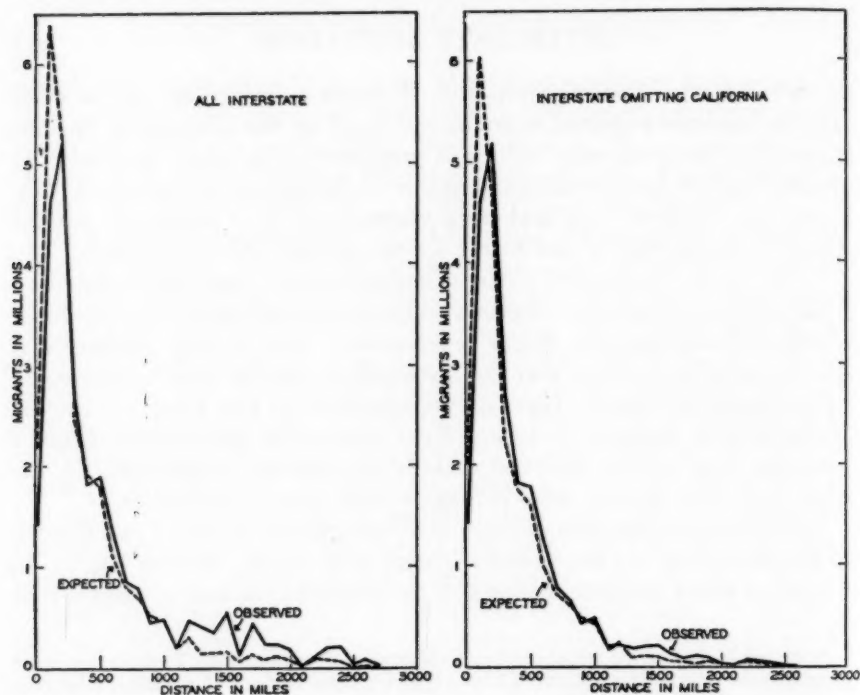
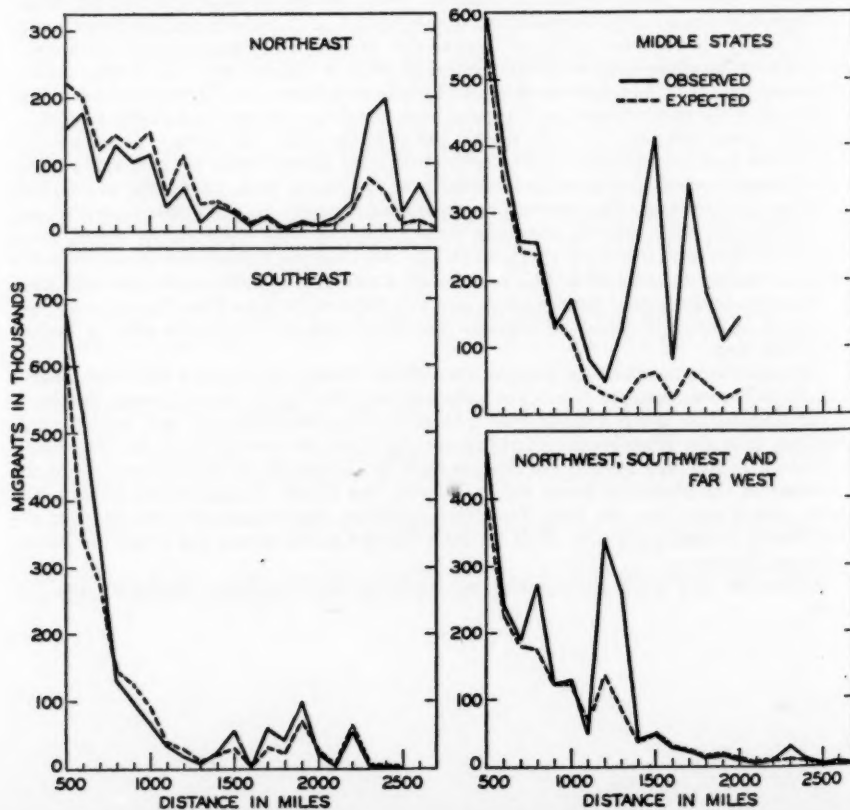
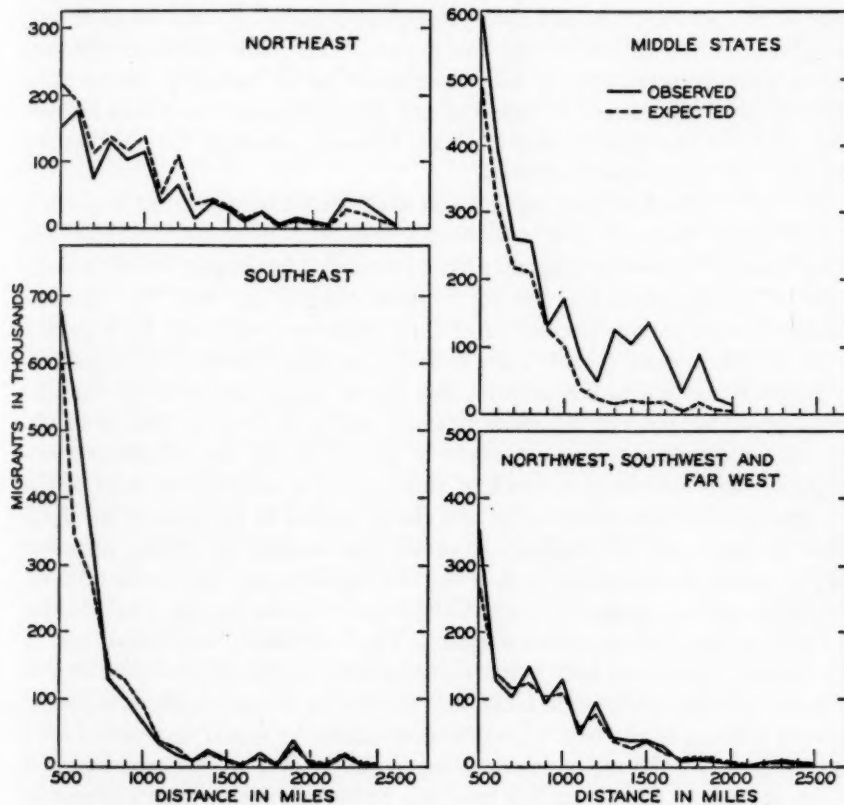


CHART 2. NUMBER OF INTERSTATE MIGRANTS BY REGIONS, 1930, TO DISTANCES OVER 500 MILES, BY INTERVALS OF DISTANCE, COMPARED WITH NUMBER EXPECTED ACCORDING TO STOUFFER'S THEORY.



they were distributed in proportion to the settled population of the state-of-origin. This undoubtedly introduced a very considerable error. The larger states had no destinations less than 100 miles from their population center; therefore, the 100-199 mile interval represents the nearest migration for

CHART 3. NUMBER OF INTERSTATE MIGRANTS, BY REGIONS, 1930, TO DISTANCES OVER 500 MILES, OMITTING MIGRATION TO CALIFORNIA, BY INTERVALS OF DISTANCE, COMPARED WITH NUMBER EXPECTED ACCORDING TO STOUFFER'S THEORY.



them, while the 0-99 mile interval correspondingly represents the nearest migration for the smaller states. Thus these two intervals taken together represented, in the main, "opportunities" without "intervening opportunities." This leads us to the second possible factor causing these large discrepancies and that is the nature of Stouffer's formula. For, although the theory on which it is based postulates no necessary relationship of migration to distance, it does overweight appreciably *absence of distance* in the first interval merely because intervening opportunities are necessarily measured in terms of distance bands.

Regarding the second discrepancy, examination of the detailed results, state by state, led us to conclude that migration to California was the major disturbance accounting for this discrepancy. All but six states—Virginia, North Carolina, South Carolina, Georgia, Alabama, and Delaware—sent more migrants to California than expected according to our application of Stouffer's theory.

We, therefore, recomputed our expected and observed migration for each state, leaving California entirely out of the picture (that is, subtracting it from both opportunities and intervening opportunities), and summarized, as before, for the United States and regions. The result improves the correspondence between theory and observation to an amazing extent. The conformity of the pattern of expected and observed migrants is now reasonably close,⁸ as the second panel of Chart 1 shows, although the discrepancy has not been completely removed.

We venture the following explanation of the disturbing effect of migration to California. Part of it may well be due merely to technical imperfections in our data. If interstate migrants have proceeded by stages, taking advantages of opportunities intervening between their origin and the ultimate California destination, the record of their progress would not be apparent in the birth-residence data. If there had been no trend away from migration-by-stages towards direct migration, this factor might not produce the discrepancy we have noted but there is every reason to believe that, with improved transportation and particularly the increased use of cheap automobiles, there has been a trend of this sort. We believe that part of the discrepancy between observation and theory would be removed if we could allow for this trend. We suggest, however, that another factor also accounts for part, perhaps the major part, of the discrepancy, and that is the qualitative difference in opportunities in California and intervening opportunities in other states. Opportunities sought in the Northeast, Northwest, and in the Middle West have been primarily economic in character: farms or jobs in industry. Opportunities in California must also, of course, afford means of earning a living to the bulk of migrants or extensive settlement would have been impossible. We are of the opinion, however, that an important part of the migration to California has been of a hedonistic rather than a primarily

⁸ The value for chi-square is less than a third as great when California is omitted as when California was included, although the chi-square values are, in all cases, quite outside the range that would indicate a close fit. With the 27 degrees of freedom in our distribution including California, a chi-square value of 40 would yield a P of .05. This is the conventional limit beyond which higher values may be considered to indicate a real discrepancy. Our value was no less than 4393! Excluding California and combining "thin" classes, we had 25 degrees of freedom. The value of chi-square for $P = .05$ was now 38, whereas ours was 1317. However, Stouffer's own results (*op. cit.*, 850), although less extremely deviant, also yield highly unsatisfactory results by this test. With the 24 degrees of freedom in the distribution in his Table 1, the chi-square value should not exceed 36, whereas it was actually 361. It is possible that the chi-square test may be too sensitive to apply to problems of this sort.

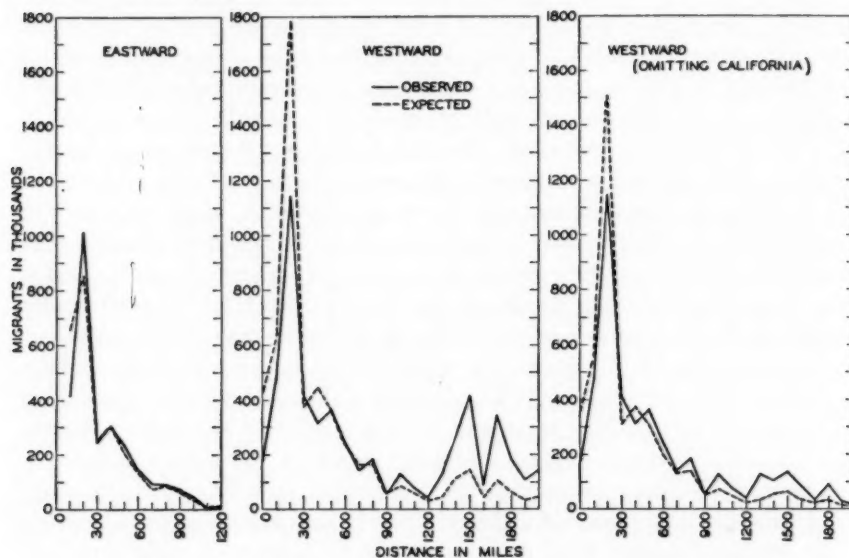
economic character and has been motivated more by climate and legend than by superior job opportunities. Insofar as this is true, we are dealing with noncompetitive opportunities in the intervening states and in California. The extent to which interstate migrants who have sought this state as destination have proceeded in stages, taking advantage of the intervening opportunities in their progress across the country, or the extent to which they have proceeded directly towards this goal, "forsaking all others," simply cannot be determined from the data at hand.

Passing to Charts 2 and 3, and columns 5 to 20 in Table 1, important regional differences in the pattern of interstate migration become apparent. The table shows that without exception, the first type of discrepancy exists in every region, that is, there is a marked excess of expected over observed in the very near distance intervals. Since this is probably due to the technical difficulties noted previously, we shall confine our discussion to the discrepancy of the second type, that is, the excess of observed over expected in the far-distance intervals, and the charts are, therefore, based only on the pattern for distances of 500 miles and over. It is obvious from Chart 2 that major disturbances, in these distances, occur in all regions except the Southeast. Migration from the Southeast has followed the conditions set up by Stouffer with remarkable fidelity. Of the other regions, the Northeast shows the least and the Middle States, the worst disturbance in the relation of expected to observed migration. Eliminating California removes the major discrepancies for the Northeast and for the combined Northwest, Southwest, and Far Western regions and even improves the already relatively satisfactory Southeastern pattern of conformity (see Chart 3). In other words, the drawing power of California pretty well accounts for the failure of interstate migration from most regions to conform to Stouffer's theory. The situation regarding the Middle West, however, is still highly unsatisfactory after the elimination of California, but the Middle States, just because of their location, represent a quite different type of situation from that in other regions. Their population is subject to the pull both from the East and from the West and a major fallacy is introduced by the neglect of the factor of direction as well as distance. The nature of this fallacy can be illustrated by the example of Indiana, where the following states are found in the first five distance intervals:

100-199 miles	200-299 miles	300-399 miles	400-499 miles	500-599 miles
Illinois	Michigan	Iowa	Arkansas	Alabama
Kentucky		Tennessee	Missouri	Delaware
Ohio		West Virginia	North Carolina	Dist. of Columbia
		Wisconsin	Pennsylvania	Georgia
			Virginia	Kansas
				Maryland
				Minnesota
				Mississippi
				South Carolina

By no stretch of the imagination can migration from Indiana to Minnesota be considered as inhibited by opportunities "intervening" in Kentucky, West Virginia, North Carolina, Pennsylvania, and Virginia. Yet the application of measurements in distance bands leads to just this sort of assumption.⁹

CHART 4. NUMBER OF INTERSTATE MIGRANTS FROM THE MIDDLE STATES, 1930, MOVING EASTWARD AND WESTWARD RESPECTIVELY, THE LATTER BOTH INCLUDING AND OMITTING MIGRATION TO CALIFORNIA, BY INTERVALS OF DISTANCE, COMPARED WITH NUMBER EXPECTED ACCORDING TO STOUFFER'S THEORY.



We therefore, divided the country in two mutually exclusive universes with respect to general direction from the Middle Western states, that is, Eastward and Westward. It was necessary to be rather arbitrary in delineating these universes. We assumed that all movement from any Middle Western states was *Eastward*, if the destination were any state in the Northeast or Southeast, and, similarly, that all movement to the Northwest, Southwest, and Far West was *Westward*. We then defined intraregional westward and eastward movement on the basis of the directional relationship of each Middle state to the others.¹⁰

The results (see the first two panels of Chart 4, and columns 21 to 24 of Table 1) show how important the directional factor is. The Eastward movement from the Middle states yields the nearest approximation to conform-

⁹ Stouffer recognized this difficulty. See page 865, *op. cit.*, where he points out that "It would be quite possible, however, to subsume the directional factor within the theory here presented" and discusses how this might have been done in his own experiment.

¹⁰ See page 783 for this footnote.

ity of the observed with the expected of any of our series. Not only the pattern but also the level of the two curves corresponds remarkably well. The Westward movement, however, continues to give a very unsatisfactory fit. Removal of the influence of California from the Westward movement (third panel of Chart 4, and columns 25-26 in Table 1), however, at last brings the Middle Western migration into a reasonable degree of conformity to the pattern predicted by Stouffer's theory.

Our conclusion, on the basis of this demonstration and after giving due weight to the crudity of the available data and of our application of Stouffer's technique to them, is that interstate migration has in general followed the pattern of opportunities and intervening opportunities very closely. This generalization holds, however, only if we allow for the major disturbances in the pattern attributable to qualitative differences in the opportunities sought in California and elsewhere and if allowance is made for the directional factor in the movement from the Middle West.

¹⁰ (Continued from 782) As follows:

		<i>Westward from</i>					
	Minn. Iowa	Mo.	Wis.	Ill.	Ind.	Mich.	Ohio
To: none	Minn.	Minn. Iowa	Minn. Iowa Mo.	Minn. Iowa Mo. Wis.	Minn. Iowa Mo. Wis. Ill.	Minn. Iowa Mo. Wis. Ill. Ind.	Minn. Iowa Mo. Wis. Ill. Ind. Mich.

Eastward was the converse of this for each state concerned, for example, none for Ohio; only Ohio for Michigan; Ohio and Michigan for Indiana, etc.

POPULATION THEORY AND POLITICS

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1. *The Political Definition of Optimum Population.* Classical economics has generally assumed that population increases or decreases according to the means of subsistence and also that the growth of national populations shows a similarity due to the international division of labor and distribution of resources in an expanding world economy. In the mid-nineteenth century in Europe, however, no factor indirectly shaped international politics more than the unevenness of population increase among the great powers. The sudden spurt of population growth in Great Britain, the slow increase and stationary population of France, the expansion in Germany and Russia, and the disappearance of the old Hapsburg Empire, translated themselves into national foreign policies, diplomatic alliances, and armed conflicts. All nations in Europe today are faced with the falling birth rate in the upper social strata which seemed abnormal in France in the last decades of the nineteenth century. This has fostered a more equitable distribution of wealth, the development of social services especially intended for the poorest families which multiply most rapidly, and a eugenic program so that the quality of the population may not deteriorate. On the other side, the disparity of population rates of increase among the nations is seen to have governed their military and productive power as passions of nationalism have waxed stronger and stronger. The state accordingly becomes fundamentally interested in numbers for the sake of maintaining the quality of the race and the racial morale as well as for manning the economic and the military machine. In an age in which the individual voluntarily can and does limit the family size with reference to his income and scheme of personal values, it is no wonder that the state also deliberately adopts population stimulants such as marriage loans and family allowances for carrying out its programs of national defense and imperialistic expansion.

The population optimum cannot be dissociated, especially in this epoch of disintegrating world economy, from the political optimum. Increase of population and the resulting economic stress in the nineteenth century called forth, especially in the democratic countries, a series of ameliorative social measures in the spheres of education, social insurance, health and labor welfare, which, therefore, naturally developed greater and continuous interest in both the numbers and quality of the population, especially of the working-class population. But the social service state of the present day encounters more serious and wider demographic problems. When political insecurity and social instability in the postwar period make national integration the primary concern even of economic policy, the solution of the population problem is no longer left to individuals, as was the case in the

liberal and international order of autonomous economic relations, but a new "political economy" stimulates an increase of numbers through governmental measures, pressures, and propaganda. It not only stresses an economic autarchy based on the production and supply of foodstuffs and industrial raw materials in the homelands, but it also strengthens the economic and political motives of national territorial expansion through a deliberate stimulation of population growth. The nation seeks to overcome nature's niggardliness by technical innovations in agriculture and by the achievements of biological and synthetic chemistry, and as it expands in population, political pressure is substituted for commercial competition and military strength is utilized to occupy new territories from neighboring nations and to open new fields of investment and economic control. At the bottom of the expansion of population is also the racial myth that the elite people, pure and undefiled, should multiply to an unlimited extent to achieve world mastery. A eugenic program becomes associated with the pursuit of population for such vital interests as national prestige and power which are preferred by the absolute state to the material interest of improvement in the standard of living of the nation. These political aims, which subsume economic aims, are deeply felt by the nation, focused and intensified as they are by education, public opinion, and propaganda. These aims dominate the population policy of many an aggressive and expanding nation in the post-war era. Even in the western European countries which are democratic and which cherish the principles of economic individualism, the aims of political security and military defense are more and more superseding the standards of material progress. There is a reciprocal interdependence of political, economic, and cultural elements. Thus the economic yardstick of optimum population less and less serves as the end of economic activity; the definition of optimum population itself becomes a political decision.

2. *The Concept of the Integral Optimum.* Accordingly, the true optimum of population is the integral optimum which is based on a harmonious coordination of the optima in the successive levels of ecology, economy, and state in respect of (a) the expectation of life, (b) real income, and (c) personal happiness and self-expression, all these from the individual standpoint; and of (a) the stability of the economic base and occupational balance, (b) the regularity and continuity of employment, and (c) national security and power, all of the latter from the collective standpoint.

Such an integral optimum is, however, a mere hypothesis or a social aspiration. It is a problem for the economic and social order. The ecologic and the economic optima can be quantitatively expressed and measured, but not the integral optimum. The realistic integral optimum numbers cannot be precisely determined since several factors which determine this optimum and also the trend of population are imponderable and unmeasurable. Besides, there is in the whole process a mutual dependence of causes and ef-

fects. The notion of the integral optimum marks, however, a definite advance in the theory of population since it furnishes a most useful analytical implement. Though in our present state of knowledge we can measure neither the integral optimum nor the degree of disequilibrium, yet economic and sociological analysis as well as statistical reasoning can help us towards isolating and classifying the causes of the trend of population either towards this optimum or away from it. Max Weber observes: "All qualitative differences [such as are involved in social situations] can be expressed in the last analysis in some form of quantitative differences of the way in which elements appear in various combinations." Thus, the partial inapplicability of the statistical method does not prevent the formation of general valid principles in population in the form that definite situations tend to approach or depart from the optimum. The integral optimum is, then, an important tool of discussion, a significant master-frame of reference, because a divergence from it means a reduction of the standards of living, material, cultural, and moral—a deterioration of the totality of collective existence. Conversely, in an ideal social order, there is such an adjustment between the life of each individual family and the life of the community that the social, economic, and ecological optimum becomes the personal or ethical optimum through the reconciliation of personal desires and values and duties to the community. This would mark hypothetically the complete success of man's social adaptations in the region, "man" being quantitatively expressed as population density. The description of the multiple bio-ecological, economic, political, and cultural factors which make up the phenomena of population growth, density, and composition and the definition of the criteria of population optima at successive levels, aid each other.

At the successive levels, a basic principle which determines population growth and a norm for population control emerges: (1) the demographic principle of probability as it applies to vitality, health, average expectation of life, and the norm of maximum longevity—which measure biological fitness; (2) the ecological principle of balance and vital solidarity of the region, and the norm of maximum use and conservation of resources—which measure the ecological fitness of the community on a continuing basis; (3) the economic principle of equi-marginal utilities that governs occupational balance and full employment, and the norm of maximum average income—which measure economic efficiency; and (4) the sociological principle of cultural selection and control governing the choice of individual and collective ends, and the norm of power and prestige of the organized state and culture—which measure national security.

Population theory could make a tangible progress by a careful demarcation of the levels of adjustment of population according to the different basic principles enunciated above. The population process is, however, a synthetic product and thus the analysis of the process which exhibits a constant inter-

action of the sets of factors, viz., natural resources, health and fecundity of the population, the arts of production, and the scale of individual values and cultural standards, is largely a methodological problem. On the other hand, the fundamental norms in population adjustment, viz., longevity, conservation, real income, employment, individual happiness, and national security, have all to be combined within a planned population policy. The norms at different levels must be combined together into the integral optimum as the basis of a rational and well-rounded population policy.

3. *The Practical Significance of an Optimum Population.* The notion of the integral optimum population has an immense significance for the war and peace of to-day. It focuses attention on the claims for *Lebensraum* of the 'dissatisfied' nations as well as on the demogenic oppositions and pressures that arise out of an exaggerated stress on historical or political factors, racial doctrines and natural geographic or economic advantages or handicaps. The development of a social optimum population in one country is indissolubly tied up with peaceful or hostile economic and political relations with its neighbors. A planned pursuit of population and economic autarchy in one country, without considering its long-run effects on the standard of living, is inconsistent with international economic cooperation, which alone can assure an improvement of the standards of living of all peoples through a better balance between population movements and developments of resources. A nation pitching its optimum population high with an eye towards a future war not merely contributes towards the lowering of its own and other peoples' standards of living but also establishes a vicious circle of unemployment and conscription, armament production and accumulation of war material and 'cannon fodder' from which there may be no escape except war itself.

This is, indeed, one of the moot questions of the age: whether nations that complain about living space for their present populations should use political stimulants to increase numbers regardless of resources. Aggression is the outcome of sheer population pressure or of confidence of greater numerical strength in a regime of universal conscription, and it may be both military, as in the case of imperialistic expansion of the Axis Powers, and economic, as in the case of Germany and Japan, whose methods of economic bargaining and penetration into the territories of their less effectively organized neighbors are aided by political pressure and greatly depress the standards of living of the latter. Countries belonging to the same order of civilization should show a similarity in the fertility trend governed by social and cultural selection, and to manipulate it by premiums and subsidies or by the propagation of a gospel of racial superiority is to commit overt aggression. Now that there are no longer large empty spaces in the world waiting for occupation, the right to claim new lands as outlets for surplus population is inconsistent with a population-encouraging state policy how-

ever camouflaged it may be by the doctrine of the divine mission of a superior race or culture. The right to claim new lands as outlets for surplus population must rest rather on the deliberate policy of the nation to check excess fertility and reduce population pressure by birth control and social pressure and propaganda. Freedom of emigration is, indeed, intimately bound up with a planned policy of restriction of numbers of the more crowded nations, since, otherwise, migration would accelerate population increase and the open spaces would be occupied by the culturally inferior and faster growing peoples until the whole earth would have no "standing room."

4. *Demogenic Causes of War.* To prevent nations from following a predatory demographic and economic policy is, however, a matter of both international mindedness and education and of international security, justice, and readjustment. On the other side, the denial to the less favored and crowded countries of foreign markets by fiscal protection and of opportunities for emigration by restrictionist policy depresses their standards of living or prevents a normal rise in comforts. The use of the dual weapon of commercial protection and exclusion of immigrants by America and the European colonial powers withholds equality of opportunity for the less favored nations and pushes back their economic optimum. Such have been the effects of the U.S.A. immigration quota laws, the Smoot-Hawley tariff, the British Imperial Ottawa pacts, and abandonment of the gold standard. To ban Japanese emigration altogether in countries which are under-populated and undeveloped but are not unappropriated, and then, as they produce manufactured goods at home for foreign markets at competitive prices, to shut these out on the plea that the lower wage costs in Japan sabotage international standards of living, is economically indefensible and politically dangerous. No doubt an optimum population fixed with reference to the man-land ratio of a distant future by the European colonial powers, who in the meanwhile keep vast empty lands in Australasia, South Asia, or Africa as their exclusive preserves, trenches on the economic optimum of neighboring Asiatics on the other side of the Pacific and Indian Oceans. This occupation of millions of square miles of productive land which are thrown out of use pushes back the world optimum and is all the more unjust as the major portion of these lands lies in the monsoon and tropical zones where only the Asiatics can work and thrive as do the white peoples in the temperate zone. Similarly, a political adjustment which destroys or checkmates the economic integrity and reduces the economic optimum of a region through the diminution of territory and of accustomed markets and outlets for surplus population, works against a realistic optimum population. This was the blunder of the Treaty of Versailles which, for the sake of liberating some peoples who had never been able to find their way to liberty, trenched upon the economic opportunities of several nations and the possibilities of

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the creation of larger economic unions that could have insured the optimum.

5. *Approaches to Population and Migration Problems from the World Standpoint.* Mere political readjustment in a new order without the elimination of the basic demogenic causes of conflict accordingly is bound to be futile. Economic reconstruction must go hand in hand with the revision of the Treaty of Versailles for laying the foundations of a durable peace. This would imply, above all, the coordination with world economy of planned economics within closed national and metropolitan areas. An effective machinery of international economic cooperation should be built up to challenge present restrictionist policies so that no nation suffers in its standard of living through lack of fair access to both essential raw materials and markets. The latter should be guaranteed by an 'open door' policy any departure from which should not obtain international sanction. Exclusion or restriction of migration, which also lowers the standard of living of peoples, should also be a matter, not of national, but of international administration. If migration is to be regulated, the regulation should come only from an international authority laying down the quotas of immigrants and establishing certain general and universally agreed upon principles guiding the selection of migrants on the basis of economic rather than racial considerations.

These suggestions will not appear utopian to those who ponder over the chronic economic instability of the world with its differential standards of living and demogenic pressures, its persistent economic offensives, and devastating wars. No doubt nations who find their opportunities for emigration and trade severely restricted to the detriment of their standards of living will aggressively seek enlargement of their boundaries and, by colonial expansion or force, open new markets and opportunities of investment if and when they can to remedy their poverty and economic handicaps. So long as the richer powers practise exclusion they must recognize the justice of the case of the poorer peoples. On the remedy of this injustice, indeed, largely depends the economic integration of mankind. Only in a more liberal world economy can the self-defeating and immaterial ends of modern nationalist policies be reconciled with the vital and material ends of improvement in the standard of living of individuals as judged by these individuals. Where there are 'two Europes' and two worlds with dual standards of living and different minimum scales of consumption by individuals, there cannot be peace; nor can there be peace where nations value numbers from the standpoint of political or military power; nor where race and color prejudice dams the rolling tide of migration from the world's heaviest zones of population pressure from spilling over into neighboring and vast open spaces.

6. *The Present Unbalance in World Population and Resources.* In the future, the world will not show that uninterrupted and unprecedented expansion of population experienced in the last century when its population

increased from 640 millions in 1800 to 2125 millions today, one continent, viz., Europe, favored by science, discovery and natural resources, alone contributing a growth from 240 millions in 1800 to about 542 millions. More and more, population growth will bring in its wake severe and increasing economic pressure for an increasing number of nations. In south and eastern Asia in particular, where the population increased from 550 millions in 1800, about the same as Europe's present population, to about 1010 millions today, the terrific population pressure on the land—more than half the human race being confined to an area which is about only 13.6 percent of the globe surface—and increasing misery would impel vast migratory movements and conflicts between oriental and oriental.

As we cross the middle of this century, the disparity of population rates of increase between the white and colored populations of the world and the congestion in Europe and in south and eastern Asia as contrasted with the emptiness of the New World would profoundly aggravate the present instability of the international equilibrium. Reckoning in hundreds of millions at present rates, the world's total population will be approximately 23 about the middle of this century, of whom 8 will be whites and 15 will be colored; there will be more than 4 derived from India; 6 from China and Japan; and about 2 will be dark-skinned, the majority of whom will be derived from Africa. Many of the white nations living under the modern capitalistic system will be showing stable populations or actual decrease. The U.S.S.R. alone with her 175 million inhabitants will show a tremendous increase to more than 210 millions towards the middle of this century. It is computed that her population will continue to expand, in view of its present fertility, until it reaches at least twice its present size, i.e., 350 millions. Assuming that the present fertility and mortality rates continue, the decline of populations of the major countries in Europe has been calculated (in millions) as follows:

	<i>Present Population</i>	<i>Estimated</i>	<i>Estimator</i>
Great Britain	46.04 (1931)	31.4 (1975)	Enid Charles
France	41.9 (1936)	39.3 (1975)	Sauvy
Germany	79.8 (1939)	80.5 (1970)	German Statistical Office

But the U.S.S.R. has enough areas (especially in Asia) for colonization and mineral resources for modern industrial production to stave off any serious international complications as the outcome of her population increase. Statisticians think it probable that the real decrease of population, which began in France in 1935 will be a general phenomenon, at least in Europe, by about 1950 and it will continue more rapidly after 1960. Ferenczi observes in this connection that the fertility rate was at least for a time declining more rapidly in the countries where the lowered birth rate is a recent phenomenon (Germany, Italy, etc.) than has been the case in the western

countries. It is impossible that the stimulation of population by state legal and economic measures in Germany and Italy will have an appreciable long-run effect. The peoples of northern and western Europe who have so far maintained their political mastery and economic ascendancy in their far-flung empires through their multiplication will show a decline of fertility that will affect their power and influence.

The momentous phase in world history associated with the Industrial and Commercial Revolution and the phenomenal expansion of the white peoples who increased from only about 155 millions in 1770 to about 730 millions today, and their acquisition, control, and exploitation of resources of the different continents outside Europe, will now be over. White humanity conjured up the spectre of the Yellow-Peril in the closing decades of the nineteenth century. The Yellow Peril has not materialized nor will it materialize in the West in the coming decades. There seems to be little possibility that the yellow peoples may swamp the children of the Eur-Americans in the future. But the White Peril to the colored inhabitants in Africa, Asia, and Oceania will be revived as one or other of the white peoples will expand and explode. Highly industrialized nations of the temperate regions whose populations unduly expand must seek to secure a larger place in the sun for obtaining a supply of raw materials and finding markets for their manufactured goods. It is in this manner that both population balance and balance of occupations of particular peoples will play an important role in world politics through favoring imperialistic or peaceful policies. Though their economic lives will interlock, differences in rates of growth of population in Europe, eastern North America and southern and eastern Asia—the favored regions where the world's population will show a heavier and heavier concentration—will provoke differential population pressures and economic and military aggressions, especially in Asia, where 1300 millions will find their way blocked for agricultural colonization in the open spaces of the New World inhabited by about only one fourth of their number. Neither morality nor economic intercourse nor physical force will be able to bar the entry of the flowing millions into the empty lands which cannot be worked by the western Europeans. This would be as necessary for the equalization of the world's standards of living as for meeting the world demand for an annual extension of 20 million acres of new land; 12 million acres for the increase of the white population and 8 million acres for the increase of the oriental population.

7. *Complementary Policies of Birth Control and Open Door as the Basis of World Peace.* No longer can population or migration problems be left to be settled except from the international standpoint if world peace is to be maintained in the face of the increase of world population. The government of each country must fashion its population policy in consonance with international economic standards so that, as there is greater economic inter-

dependence of countries, their vital statistics move in greater unison with one another. For the first time in the history of the human species, reproduction is coming under control. This is the outcome of the spread of knowledge and practice of contraception. Man is no longer the breeding animal he once was; he now subjects his multiplication to intelligent care and regulation just as he now controls infirmity and disease by medicine and sanitation and controls antisocial behavior by education. At no time in the past did the state have an adequate understanding of the social and economic conditions which govern natality nor could it deliberately plan them so as to decrease or increase the population. Modern civilization, indeed, accepts population not as a menacing and devastating force ever leveling down standards of comfort, education, and welfare, but as one which can be partially directed by deliberate governmental policy and education for human culture and progress as well as for peaceful interracial intercourse. An understanding of the optimal conditions and limits of population as well as of the different kinds of "checks" and controls gives us hope for the future. In an age of economic and social planning, the population question ought to be tackled as the very basis of international relations by the deliberate policy of all governments.

Birth control among the overcrowded countries and freedom of migration into the new and unoccupied lands under the control of the fortunate powers thus emerge as the necessary dual prelude to world peace. Without birth control, migration cannot alleviate the evils of over-population in the emigration country nor can it increase the rate of population growth in the new country without threatening it with the burden of misery of the old land with its cry for *Lebensraum*. Birth control could prevent areas of dense population and economic advantage from becoming areas of abject misery or of explosive energy. Planned migration under an international code would at the same time offer opportunities of toil and thrift to the land-hungry peoples and remove a real obstacle to world cooperation. By facilitating the utilization of vast and untapped agricultural and industrial resources, it would also help to wipe out the present chronic world shortage of food and essential materials, while any danger of racial friction and outbreaks might be minimized by planned land settlement of migrants in the open spaces who would largely be subsistence farmers and would require little of public assistance and spoon-feeding. Such groups of agricultural pioneers and settlers could be appropriately derived from overpopulated but climatically similar regions whence they would import suitable crops and work-animals, agricultural practices and institutions. Thus, migration and population problems are inextricably bound up with each other for their solution and the solution should be sought internationally in the interests of world peace. The twofold complementary program of birth control and 'open door' adopted by the contrasted regions of the earth from the standpoint of the

welfare of the international economic community would alone accelerate the trend towards world optimum population and productivity, since the economic exploitation of the pioneer and immature zones will add to the aggregate purchasing power of humanity and thus increase both wealth and employment for the industrial millions of the crowded manufacturing zones of the earth. Thus, the Occident and the Orient, the Old and the New World, may approach equality in the supply of resources and essential materials and in the plane of living in a juster and more rational world economy.

War or peace depends largely on the acceptance of certain universal and objective criteria in respect of material and cultural standards of living by the nations; it also depends on the statesmanship of each which can coordinate a national with an international optimum population policy so as to bring about an approximation of the national standards of living and conditions of security and guarantee a minimum standard for all peoples. Such coordination rests on a simultaneous combination of the qualitative and the quantitative optima in population planning by each country. Population planning by each great nation according to the notion of the integral optimum will then be the cornerstone of world peace, because social justice and world peace are one and indivisible.

SOCIAL FACTORS IN BIRTH CONTROL

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WHILE intentional limitation of offspring cannot be regarded as the sole "cause" of the decline in fertility, it is safe to assume that it has been the most important factor in recent decades.¹ The purpose of this paper is to discuss theoretically those societal conditions and changes which appear to be the most important incentives to the diffusion of birth control practices. Since such practices are found under widely varying conditions in quite different types of societies, this theory claims validity only for the Western culture area and only for the period of declining fertility since the end of the nineteenth century.

The rate of procreation, being largely dependent on human will, is essentially conditioned by the totality of social life and especially by the socioeconomic order of the society. The same pattern of behavior can be differently motivated in different types of society.² Further, the more complex the structure of a society, the greater will be the variety of factors which can eventually induce limitation of offspring. Therefore, instead of attempting to formulate a "general law" or to discover the "final cause" of birth control, one will have to point out the specific constellations of various possible causes with various peoples and with different groups and classes of these peoples. Furthermore, the changes within these constellations, which are conditioned by social developments, should be considered. Finally, among these various "causes," those should be studied primarily which can be assumed to be effective in the broad masses of a population. Thus, it may be granted that the desire to have children may have been weakened in certain circles, especially in metropolitan populations, but since this is far from universal, it cannot account for the general and steady decline of the birth rate since the end of the nineteenth century. A very large proportion of those who practice birth control would probably have more children if they were not induced by strong reasons to resort to contraception or abortion.³

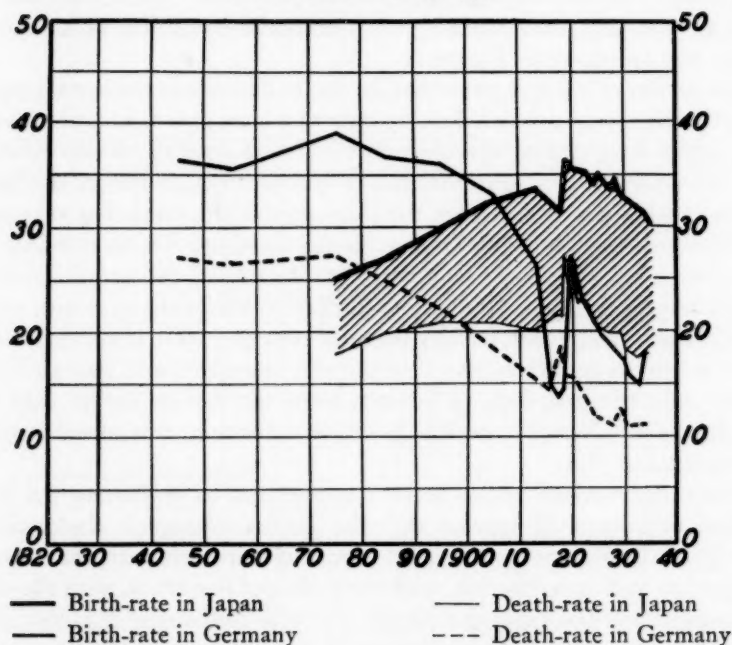
¹ For other factors, see: L. S. Cottrell, Jr., "Research in Causes of Variations in Fertility: Social Psychological Aspects," *Amer. Sociol. Rev.*, October 1937, 678 ff.; Regine K. Stix, "Research in Causes of Variations in Fertility: Medical Aspects," *Amer. Sociol. Rev.*, October 1937, 668 ff.; Willy Hellpach, *Einführung in die Völkerpsychologie*, Stuttgart, 1938; Rudolf Heberle, "Wirtschaftliche und Gesellschaftliche Ursachen des Geburtenrückgangs," *Archiv für Bevölkerungswissenschaft und Bevölkerungspolitik*, VII, 1, Leipzig, 1937.

² W. I. Thomas, *Primitive Behavior*, New York, 1937; S. R. Steinmetz, *Gesammelte Kleinere Schriften zur Ethnologie und Soziologie*, III, 6, Groningen, 1935.

³ A recent inquiry conducted by a popular American magazine on the subject of the number of children wanted, showed that, although about 80 percent of the women replying were in favor of birth control, about 40 percent said they wished they had more children than they had, and 30 percent considered four children the ideal number. "What Women of America Think about Birth Control," *Ladies Home Journal*, March, 1938. Also, Clyde V. Kiser, "Voluntary and Involuntary Aspects of Childlessness," *Milbank Mem. Fund Quart.*, Jan. 1939, 50-68.

While the importance of birth control propaganda and the availability of effective contraceptives at low cost should not be underestimated, these factors alone cannot explain such a fundamental change in behavior as that which has caused the decline of fertility since the end of the nineteenth century. Those techniques which are still most commonly used⁴ have been

FIGURE 1. COMPARISON BETWEEN THE BIRTH-RATES IN JAPAN (1875-1933)
AND IN GERMANY (1845-1933)



The space between the two curves represents the natural increase. The shading is merely a device to improve the visual impression. Observe that the general pattern of population movement is very similar in the two countries but that Japan lags about 40 years behind Germany.

known for centuries. Their use was fairly effective with certain groups of Western peoples long before the great decline of fertility began. On the other hand, mass production of improved devices would scarcely have developed had there not been a strong and widespread demand for them.

While it is generally known that the greatest decline in fertility has occurred in the "upper" social strata, it should not be overlooked that a slighter

⁴ Regine K. Stix, "Birth Control in a Midwestern City," *Milbank Memorial Fund Quarterly* XVII, No. 1, 2, 4, 1939, page 84, states that almost 60 percent of this sample used either *coitus interruptus* or douche. Abortion is also a very widespread and a very old means of "birth control."

rate of decline of fertility in the broader masses must have resulted in much greater absolute decreases in births and therefore must be considered of primary importance in its effect on population growth.

Industrialization in all countries seems to have been, in the beginning, accompanied by an increase in fertility. At least, the crude birth rates rose, on account of a variety of circumstances, precisely in the western industrial countries. Only after some decades of industrial development did the birth rates begin to decline. This applies also to "new" industrial countries, with a time "lag" over against "old" industrial countries, as is shown for Japan and Germany in Figure 1.

The decline of fertility must then be due to changes in the social structure of industrial societies which develop only at a later phase. In order to obtain sufficiently long and comparable time series of fertility trends in various countries during the nineteenth and early twentieth centuries, the ratio of births occurring in one year to the marriages of the preceding year can be used.⁵ These birth-marriage ratios can be obtained for several European countries for a sufficiently long period to determine the approximate date at which fertility began definitely to decline. While in the countries studied, this date is rather recent, usually between 1875 and 1900, it appears that the older industrial countries, like England and Germany, and particularly the highly industrialized state of Saxony, show the decline earlier than those countries like Norway in which industrialization was more retarded⁶ (Figures 2 and 3).

These observations are of decisive importance in explaining the decline of fertility because it appears that the gradual change in the population growth of the European industrial countries coincided with the ceasing of emigration to North America, with the ending of free trade, with the closing of the great colonial expansion period, and with the coming of cartels, trusts, and trade unions—in other words, with transition from "full capitalism" to "late capitalism."⁷ Heretofore, this connection has not been recognized clearly because of prevailing concern with the idea of an immediate relation between individual wealth and fertility.

These changes affected the agricultural classes (which were only partly integrated into the capitalistic system) only slight at first, because, thanks to protective tariffs on agricultural products and migration of laborers to industrial districts, neither the social stratification nor the distribution of land holding was changed essentially. In Prussia, the decline of rural birth-

⁵ Adolphe Landry, *La Revolution Démographique*, 30, Paris, 1934, uses them without the one year lag. The birth-marriage rate is, however, not suitable for an analysis of short term fluctuations in fertility. The rather arbitrary lag of one year and the inaccuracy in procedure of relating all births of one year to only the new marriages of the preceding year should caution against such application.

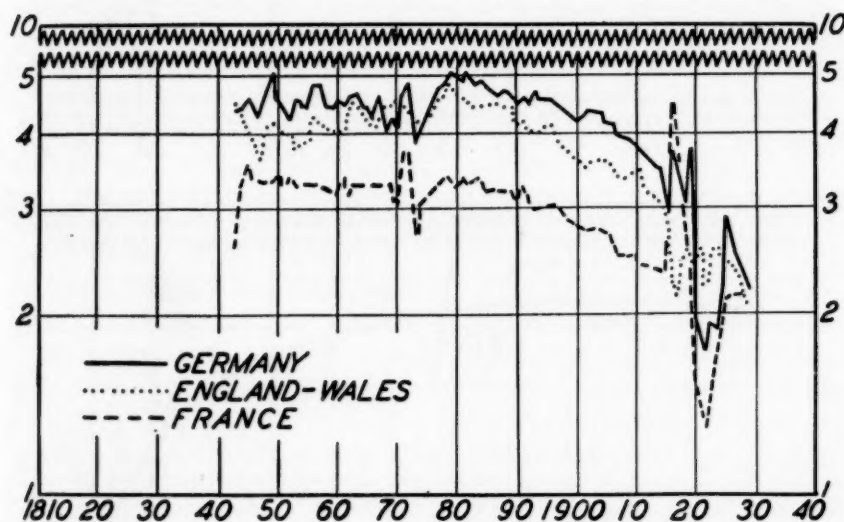
⁶ For detailed discussion, see Heberle, *op. cit.*, 5-12.

⁷ For definition, see W. Sombart, "Capitalism," *Encyclopedia of the Social Sciences*.

marriage rates occurred about ten years later than that of urban rates.⁸

The decline in fertility, then, began in the industrial/commercial sectors of the population. Whereas, in the early phases of industrialization, fertility rates had been highest in the new industrial communities—even higher than in rural villages—a reversal of the relationship of rural and urban fertility rates now took place. Fundamental sociological changes had occurred in this portion of the population, which was increasing both in numbers and in significance. The proportion of people depending on income from labor had increased and entirely new strata of salaried employees and skilled

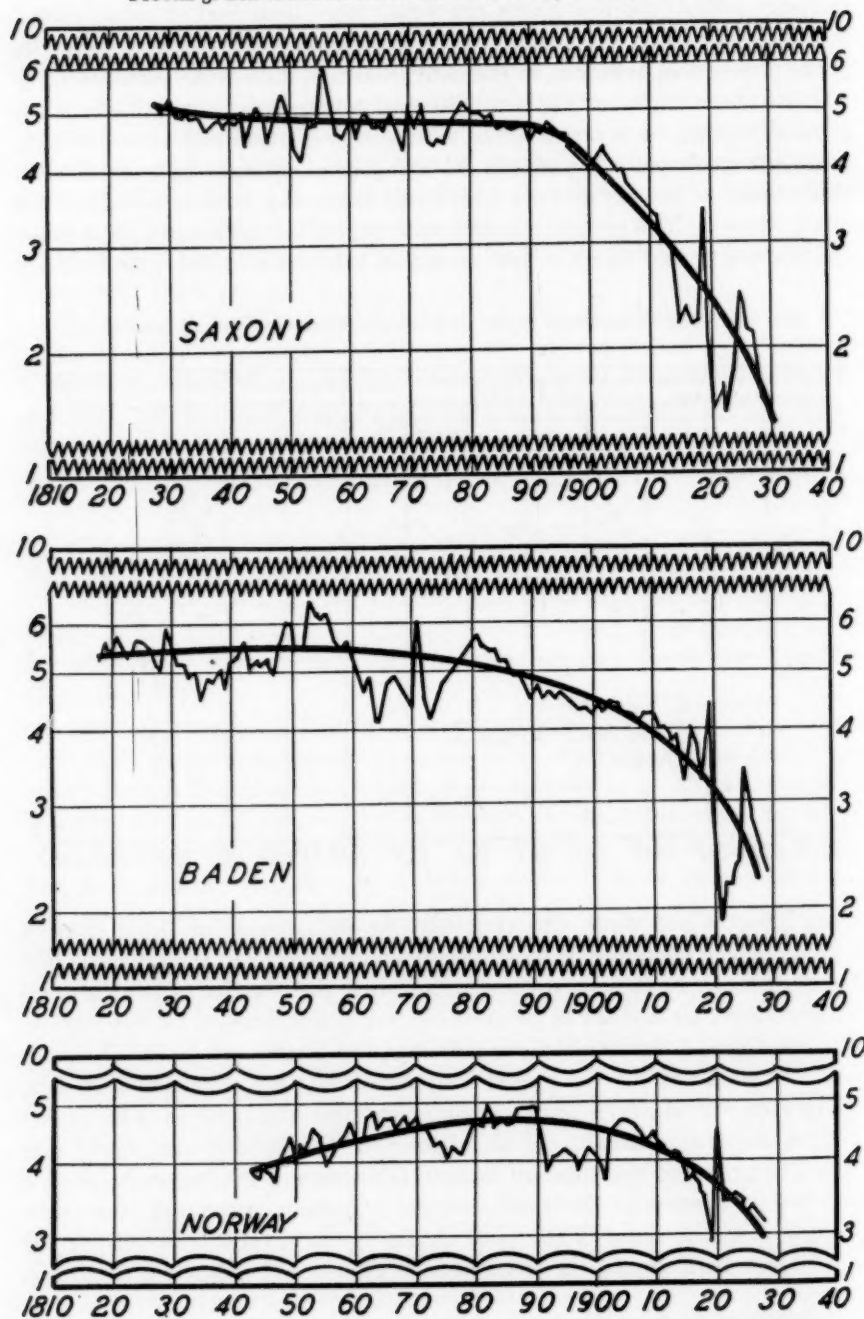
FIGURE 2. BIRTH-MARRIAGE RATES IN GERMANY, ENGLAND-WALES, AND FRANCE



wage laborers had come into existence. An explanation of the decline in fertility should therefore be based chiefly on an analysis of the attitudes and social structure of these new classes, since it is the practice of birth control among them that is really of greatest numerical significance. Unfortunately, no time series of fertility rates or marriage and birth rates by social classes could be obtained for the period in question but the Prussian statistics, which each year classifies births according to the social position of the father and marriages according to the social position of the bridegroom, shows that from 1875 to 1900 the share of factory laborers and employees in private and public service in the total number of persons marrying rose more sharply than the share of the same classes in the total number of parents to children born during the same period. This would indicate a decline in

⁸ Heberle, *op. cit.*, 9.

FIGURE 3. BIRTH-MARRIAGE RATES IN SAXONY, BADEN, NORWAY



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fertility among these classes; whereas, such marked disparity is not discernible with regard to owners and operators and agricultural laborers.⁹

In these new classes of wage earners, the motivations for birth control differ from those found among the peasantry or the upper strata of the middle classes because the wage earners have no property in land or capital which they might desire to prevent from being dispersed among too many heirs. Neither have they any incentive to want an heir since they have no farm, factory, nor firm to bequeath. The family, having lost many of its functions, tends to be regarded in these classes less and less as a valuable social unit that one might feel obliged to preserve and strengthen; moreover, the general conditions under which these families live (at least in the cities) are not likely to make family life rich and appealing and so give a strong inducement to each new generation to build up a large family.

A second and most significant factor in the decline of fertility is the specific and essentially new type of income conditions which exist in these classes. As a general rule, the single source of their support is a wage-income during their entire lives. Furthermore, this class has no opportunity to supplement their income from a capital investment, as may the artisan or small shopkeeper, or of increasing it by rising to the position of an independent proprietor as was possible formerly for a journeyman or business apprentice. While in all western countries a large part of the increase in the gainfully employed population since the end of the nineteenth century has gone to the classes depending on wages, the increase in these classes has been augmented in Germany and other European countries by the annihilation of middle class wealth that occurred from 1914 to 1924. The whole structure of society has been deeply affected by this change and in consequence many patterns of social behavior have also been changed. The significance of this change becomes apparent if one considers that wage-income is allocated in principle without regard for the needs of a family as determined by the number of dependent children. Wages are determined by the market value of labor.

Thus, there is a very broad social stratum in which the individual cannot expect (as can the independent artisan and the businessman under normal circumstances) that, as his occupational experience and ability increase, his income will be substantially increased and adapted to the growing size of his family. On the contrary, the wage earner must face the fact that at forty years of age he will probably have reached the maximum wage rate and he must realize that his income will remain at a stationary level or will begin to decrease precisely in those years in which the younger and adolescent children in a large family occasion expenses of great magnitude.¹⁰ The usual

⁹ Heberle, *op. cit.*, 9-11, Figures 5 and 6.

¹⁰ Deutschnationaler Handlungsgehilfenverband, "Die Gehaltslage der Kaufmannsgehilfen," Hamburg, 1931, and Gewerkschaftsbund der Angestellten, "Die Wirtschaftliche und Soziale Lage der Angestellten," 1931, 34, 130.

means of adapting the family income to the needs of the family is the gainful occupation of the wife and children in order to supplement the man's income. If children can be gainfully employed when they have scarcely reached the 'teens, a condition which was quite common in all industrial countries until child labor was legally restricted, the economic incentives for birth control will be slight. Where child labor still exists, as in agriculture and certain home industries in some countries, birth rates are usually high.

The supplementing of the family income through occasional or permanent employment of the wife is practically universal among factory workers and is widespread even in families of salaried employees. Women have always been engaged in productive work and their employment in factories is largely a substitute for the former production of goods in the household. However, it is precisely this transfer of work from the home to the factory or office that becomes an obstacle to the raising of large families, because it is probable that a woman who is dependent upon extra-household work will usually attempt to restrict the number of children or at least to prolong the period between births. Since the adaptation of the wage income to the size of the family is confined within narrow limits, it is clear that one must either adjust the size of the family to the income or lower the level of living.

This statement may seem to be contradicted by the findings of most studies of differential fertility which show an inverse relationship between socioeconomic position and fertility. It seems, however, that the logical tendency towards a positive correlation between socioeconomic position and fertility has been only temporarily obscured by the more rapid spread of the practice of birth control in the less wealthy families of the upper socioeconomic strata and in addition by the later marriages in these classes.¹¹ Further, the usual method of analyzing fertility differentials by comparing income groups or occupational groups (often ill-defined from a sociological point of view) has probably resulted in obscuring more significant correlations. From the foregoing discussion, it will be obvious that the effect of income levels on fertility could be clearly demonstrated only if employers were separated from employees. If these two classes are combined in the studies on fertility differentials by income groups, the factors of security and of income change during the life-cycle of a family would not be considered. An independent retail merchant and an employee in a retail store, although their incomes may be equal, are in very different situations regarding the raising of a family. The former is, within the limits of the capitalistic economy, master of his fortunes while the other is not.

It would be further desirable to compare the various levels of income within the same social classes, since what really affects behavior with regard

¹¹ Cf. K. A. Edin and E. P. Hutchinson, *Studies of Differential Fertility in Sweden*, London, 1935; F. Burgdoerfer, "Geburtenrückgang bei Arm und Reich. Die Umkehrung der Wohlstands Theorie," in *Der Internationale Kapitalismus und die Krise: Festschrift fuer J. Wolf*, Stuttgart, 1932, 122-132.

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to birth control is not the absolute amount of income but the relation of the income to the standard of living which is customary in a particular social stratum, as will be explained later. Most studies of differential fertility have neglected these requirements. Since Edin and Hutchinson's¹² study of differential fertility in Sweden, and Burgdoerfer's¹³ data for Berlin, and Wood's¹⁴ findings, it has become very likely that under conditions of widespread practice of birth control a positive correlation between fertility and wealth will become apparent—at least within the same social classes.

Many writers have expressed astonishment and even moral indignation about the fact that apparently many married couples in every social stratum are unwilling to forego certain amenities of material comfort in order to raise a larger number of children. "Materialism" and "individualism" have been indicated as the causes of such behavior. Our contention is that such a verdict ignores very essential aspects of the problem. In the first place, the "standard of living" of each social stratum is determined by its folkways. Therefore, the individual simply cannot arbitrarily alter his own way of living without subjecting himself and his family to disapproval. This dependence of social prestige on the compliance with societal standards of consumption is disregarded by those who try to explain the spread of birth control in terms of "materialism" and "individualism." Suppose a father of five or six children, who is a clerk in a department store or bank, should move to a working class district of his town in order to make ends meet, wear his suits six years or more, and drive an old car. Would he not be censured by his fellow clerks for disregarding the standards of living of his occupational group, and would he not even be criticized by his superiors?

Within each social class, this standard of living is determined by the relatively few families having the greatest purchasing power. The various standards of living differ chiefly in the amount spent for food, housing, clothing, and education of the children. In the U. S. A., cars are also a characteristic element of this kind of expenditure. Now it is well known that the proportion of the total income spent on items of this kind tends to increase inversely to the size of the total income. Thus the poorer families in each standard-of-living class have a smaller margin for economizing than the more well-to-do.¹⁵ In the lower income group of the entire population, these margins tend to become so small that the level of living necessarily tends to be inversely related to the number of children. This is perhaps most obvious in regard to housing. G. and A. Myrdal and others have emphasized

¹² *Op. cit.*, 74, 79, Table 21.

¹³ *Op. cit.*

¹⁴ F. A. Wood, "The Relation between Intelligence and Birth Rate," *Verhandlungen des Internationalen Kongresses für Bevölkerungsforschung*, Rome, 1931, Vol. 2. See also J. W. Innes, "Class Birth Rates in England and Wales, 1921-1931," *Milbank Memorial Fund Quarterly*, January 1941, 72-96, showing for some sectors of the population a positive correlation between fertility and social status.

¹⁵ Frank Lorimer and Herbert Roback, "Economics of the Family Relative to Number of Children," *Milbank Memorial Fund Quarterly*, April 1940, 114-136.

the influence of housing conditions on fertility in European cities.¹⁶

For the United States, Warren S. Thompson,¹⁷ has discussed the influence of housing conditions on fertility.

Since modern apartments or houses of a size adequate for three or four child families are beyond the means of most people, many families find themselves in the dilemma of being forced to choose whether they will maintain the standards of housing they consider essential to their position and have but one or two children, or will move to poorer quarters in less desirable neighborhoods and have more children. . . . In a community where economic status is highly prized and is judged to a considerable extent by the housing one uses, it is inevitable that many will choose to maintain their housing status at the expense of curtailing their families.

In the middle and higher income levels of the wage-earning and salaried classes, the margin left for shifting expenditures in favor of raising children would be larger but in these classes the pressure for conformity in consumption patterns is felt much stronger—even more so than among the wealthy and socially "arrived" sections of the upper classes. Migratory and vertical social mobility contribute to this condition.¹⁸ The new middle classes will be especially aware of the insecurity of their social position. Those who have risen from the working class will therefore endeavor to strengthen their new position and to impress their new dignity on their fellow citizens by strict observation of stereotyped standards of living. Those descending from the farmer and other small proprietor classes will, of course, strive to maintain at least a standard of living as closely equivalent as possible to that of their original class. If their salaries are low, they will sooner restrict the size of their families than suffer a loss of social prestige. People whose social prestige is assured by their belonging to a family socially recognized in the community are much more independent in this respect than the broad mass of the so-called new middle class. Certain groups in the professions and, in some countries, the higher civil service personnel and the army officers are faced with the necessity to compete in displayed consumption with the much wealthier groups of leading business men, a fact which obviously leads to late marriages or to willful limitation of offspring.

In some countries, provisions have been made to offset the economic disadvantages of large families by granting family allowances to civil service officials and similar groups. A recent thorough investigation of one of these groups, which may be considered typical, shows, however, that these allowances are not sufficient; they are too early discontinued; they do not really increase in proportion to the number of children; and they fall short of increases in expenditure for education, housing, and service. The data

¹⁶ G. Myrdal and A. Myrdal, *Kris i Befolkningsfragan*, Stockholm, 1934. H. Harmsen, "Die Wohnungsgesetzgebung der Niederlande," *Archiv. fuer Bevölkerungswissenschaft und Bevölkerungspolitik*, Leipzig, 1935, 80. W. Goodsell, "Housing and the Birth Rate in Sweden," *Amer. Sociol. Rev.*, December, 1937, 850-859.

¹⁷ W. S. Thompson, "The Effect of Housing upon Population Growth," *The Milbank Memorial Fund Quarterly*, October 1938, 363-364.

¹⁸ R. Heberle, *Über die Mobilität der Bevölkerung in den Vereinigten Staaten*, Jena, 1929.

given show that in all ranks of officials and at any age, the officials with three or more children are worse off than those with only one or two, and these are even worse off than those who have no children or are unmarried.¹⁹

We find, then, as one of the incentives to the practice of birth control, the disparity between the socially stereotyped standards of living and the actual spendable income in the lower income levels of each social class.

Another incentive for birth control is the element of insecurity in wage incomes. With many classes of wage earners, short-term jobs have become more characteristic than permanent jobs—a trend readily noticeable in agriculture and all other seasonal industries. Furthermore, wage incomes are dependent on business cycles. In recent years, these insecurities have become almost normal phenomena. Gradually, the masses of wage earners have become aware that to be capable of adjustments to sudden changes in income or to be able to migrate to places offering better employment opportunities is a definite advantage. Awareness of such facts furnishes an incentive to keep the family small.

It is a well-known fact that business cycles are indeed followed by fluctuations in the birth rate. In predominantly agricultural countries, where contraception is not universally practiced, marriage rates fluctuate with the fluctuation in the size of the crops, thus effecting a positive correlation between the latter and birth rates with a "lag" of a few years. Where birth control is more generally practiced, as in most industrialized countries, business cycles tend to be more directly correlated with fluctuations in the birth rate. This has been shown for Germany by Zahn and by Sauvy,²⁰ for England by Dorothy S. Thomas.²¹ Burgdoerfer is of the opinion

that the unusually sharp drop of the birth rate curve in Germany in the past few years has been affected to a certain degree by the serious national and economic crisis [and that] the tempo of the decline of fertility has been thereby considerably increased.²²

A recent computation of gross and net reproduction figures for the more important countries²³ shows almost universally the lowest level in the late depression years, 1932-33, and a slow rise in the following year of recovery.

Of course, the adjustment to a new social situation is a slow process. Long

¹⁹ K. Lehmann, *Untersuchungen über Gehalt und Kinderzahl bei mittleren und höheren Beamten*, München und Berlin, 1937.

A recent study of farm families in the winter wheat belt shows that the spendable income per "ammain" is inversely related to the number of persons in a farm household and that more than three or four children under those conditions would be definitely a liability and not an asset as has been often assumed. O. D. Duncan, "Farm Family Organization in Oklahoma," Ph.D. thesis, Louisiana State University, 1941.

²⁰ A. Sauvy in *Journal de la Société de Statistique de Paris*, 1934, 75: 56. Of course, a fluctuation in business is never followed by a simultaneous reaction in the birth rate. Rather, the birth rate curve lags behind the business cycle curve.

²¹ Dorothy S. Thomas, *Social Aspects of the Business Cycle*, London, 1925.

²² Burgdoerfer, *Bevölkerungsentwicklung im Dritten Reich*, Berlin, 1935, 63.

²³ *Population Index*, April, 1938, 127.

established behavior patterns are often changed only from one generation to the other. Thus, it is not astounding that fertility rates among industrial laborers were very high during the early period of large-scale industry although the individual worker at that time enjoyed perhaps less security than he does today. This factor of adjustment is overlooked by those who, like Ungern-Sternberg, contend that the decline of fertility was fostered by social security legislation.²⁴

To be sure, only the temporary fluctuations and not the permanent decline in fertility are to be explained by the influences of business cycles. Moreover, one must distinguish between the short-term effects of business fluctuations upon the birth rate and the effects of the consciousness of economic insecurity in general upon the "trend" of the birth rate. If the reaction to the short-lived depressions which are so easily noticed takes place only after a lapse of about two years, it is obvious that the reaction to the less noticeable structural changes must take place much more slowly. The general observation that even in the most traditionalistic groups, a decline of fertility has finally occurred, speaks for its connection with the universal changes in social structure which we have discussed.

An objection to this theory might be raised by pointing out that, paradoxically, the decline in the trend of fertility rates began, at least in Germany and England, just at a time of apparent prosperity. Closer analysis of German data shows, however, that during the decade preceding the first World War, the mean real income per capita of the population did not rise but oscillated around the level of 1900.²⁵ The general impression of an increase in wealth in the last decade before the War must therefore have been created by an increase in some income groups, whereas others declined. As a matter of fact, real wages increased only up to about 1900 and then began to decline. This was chiefly due to the rise in prices of goods most necessary in the family household, especially food and rent. This rise in the cost of living probably affected the budgets of employees and officials, whose salaries were less easily adjusted to the price level than the wages, even more than those of the laborers. It seems therefore not surprising that the birth rate began to decline earlier and fell somewhat more in these classes than in the labor groups. Other urban classes, especially handicraftsmen and small retail business men, must also have been affected by the rising cost of living. This can be said with a fair degree of certainty with regard to housing conditions. While the wealthier classes achieved a luxury in housing never before attained, the housing conditions of the broad urban classes did not improve. It would be rather surprising had this deterioration in real incomes not affected fertility, since, as we have tried to explain, a certain standard

²⁴ Roderich von Ungern-Sternberg, "The Causes of the Decline in the Birth-Rate within the European Sphere of Civilization," Cold Spring Harbor, Long Island, N. Y., Eugenics Research Assn., 1931. Monograph series, No. IV.

²⁵ For detailed discussion see Heberle, *op. cit.*, 26-29.

of living once obtained will be defended at all costs. In this connection, it is interesting that Edin and Hutchinson found that married couples whose income had declined during the first ten years of marriage, had, on the average, a lower fertility than couples whose income had remained constant, while an increase in income correlated with highest fertility.²⁶

The structural changes in the economic system which began during the last two decades before the World War have become reinforced during the postwar years, especially in the countries which suffered directly by the war. The decrease of emigration and of internal migratory mobility,²⁷ the destruction or redistribution of wealth by inflation, the concentration of economic power with large financial and industrial concerns and the consolidation of plutocratic stratification resulting therefrom are, from the point of view of population theory, the most important structural changes. Economic insecurity became more intensive and more universal. A feeling of precariousness of economic existence, unknown to the generation of our parents and grandparents, spread through almost all strata; occupational prospects became entirely unpredictable; nobody could count upon normal opportunities for himself or his children. On the other hand, the standard of living in broad social strata was still modelled after that of an economically secure farmer and middle class society. With such a discrepancy between standards and reality, it is easy to see that the more precarious the social position of a family, the sooner it will have recourse to birth control.²⁸ During the depression of 1929-33, the pressure of these insecurity factors produced a decline of fertility unprecedented in recent history.

In the light of these considerations, the decline of fertility appears to be conditioned by a complex of factors all of which may be considered phenomena of the period of "late capitalism" (Sombart), just as the unprecedented growth of population from the eighteenth to the end of the nineteenth century was a concomitant of the industrial system during its most flourishing period ("*Hochkapitalismus*," according to Sombart).

These phase changes in a way are a magnified image of the processes taking place during the various phases of a business cycle. Since the birth rates react even to these temporary fluctuations, it would not be surprising if they reacted all the more to the secular trend-phases of the economic development. We believe that by this theory it is possible to overcome the paradoxes of the problem which have wrecked all attempts to explain the decline of fertility and differential fertility in terms of poverty or wealth. Of course, this theory needs testing by further comparative studies both of differentials and trends of fertility under a great variety of conditions. If found to be true, it would leave little prospect for an automatic recovery of fertility but it would furnish some clues to a possible population policy.

²⁶ *Op. cit.*, 83-85.

²⁷ R. Heberle and F. Meyer, *Die Grosstaedte im Strome der Binnen-Wanderung*, Leipzig, 1937.

²⁸ I. H. Pitt and L. F. Rivers, *Population*, 1933, I, 20.

OCCUPATIONAL BIRTH AND MARRIAGE RATES, WISCONSIN, 1920-1936¹

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THIS study describes the birth and marriage rates, regarded as cultural phenomena, of different occupational classes, and the reactions of these rates to the violent changes in business conditions that occurred during the period 1920-1936 in Wisconsin.² The occupations included are farmer, professional, semiprofessional, proprietor-and-official, agent, clerical, skilled, domestic-and-personal-service, semiskilled, unskilled, indefinite, and unclassified. Information concerning births and marriages was obtained from the records of the Wisconsin Bureau of Vital Statistics, while the base populations were taken from the federal Census for farmers, and from the directories of nine major cities³ of Wisconsin for the other occupations. Births or marriages were classified in the farm group if the husband's or father's occupation was entered as "farmer" on the official certificate. They are therefore births to fathers or marriages of grooms who regarded themselves as farmers or who were regarded as farmers by the attending

¹ Grateful acknowledgment is made of a generous grant made by the federal WPA, of aid by the Research Committee of the University of Wisconsin, and of the cooperation of Francis Kester, Director of the Wisconsin Bureau of Vital Statistics. John Teter, now of the Milwaukee State Teachers College, assisted in the early stages of the project. A more detailed report will be found in Melvin S. Brooks, *Wisconsin Birth and Marriage Rate Trends by Occupations, 1920-1936*, Ph.D. thesis, University of Wisconsin, 1941.

² Representative studies in this field include: Clyde V. Kiser, "Trends in the Fertility of Social Classes from 1900 to 1910," *Human Biology*, 1933, 5: 256-272; Clyde V. Kiser, "Variations in Birth Rates According to Occupational Status, Family Income, and Educational Attainment," *Quart. Bul. Milbank Memorial Fund*, Jan. 1938, page 46; Clyde V. Kiser, "Birth Rates and Socio-Economic Attributes in 1935," *ibid.*, April 1939, 17: 150-151; Clyde V. Kiser, "Recent Analyses of Marriage Rates," *ibid.*, July 1937; Frank W. Notestein and Xarifa Sal-lume, "The Fertility of Specific Occupational Groups in an Urban Population," *ibid.*, April 1932; Frank W. Notestein, "Differential Age at Marriage According to Social Class," *Amer. J. Sociol.*, July 1931, 37: 22-48; Thomas C. McCormick and Paul C. Glick, "Fertility Rates in Wisconsin, 1920-35," *ibid.*, Nov. 1938, 44: 401-407; Thomas C. McCormick and Douglas W. Oberdorfer, "Marriage and Divorce Rates in Wisconsin, 1920-1935," *ibid.*, a forthcoming issue; Stefan Szulc, "Research on Differential Fertility in Poland," *Population*, Nov. 1934, 1: 30-34; H. W. Methorst, "Differential Fertility in the Netherlands," *ibid.*, April 1935, 1: 34-35; Gunnar Myrdal, *Population: A Problem for Democracy*, New York, 1940; John W. Innes, *Class Fertility Trends in England and Wales, 1876-1934*, New York 1938; K. T. Lim, "Social Class Differences in Frequency of Marriage," (*Brit.*) *Sociol. Rev.* July 1939, 31: 309-327; Douglas W. Oberdorfer, *The Effects of the Depression on Wisconsin's Marriage and Divorce Rates*, Ph.D. thesis, University of Wisconsin, 1941; D. V. Glass, "Marriage Frequency and Economic Fluctuations in England and Wales, 1851 to 1934," Chapter VI in *Political Arithmetic: A Symposium of Population Studies* (ed. by Lancelot Hogben), London, 1938; Dorothy S. Thomas, *Social Aspects of the Business Cycle*, London 1925; M. B. Hexter, *Social Consequences of Business Cycles*, New York, 1925.

³ Fond du Lac, Green Bay, Kenosha, La Crosse, Madison, Manitowoc, Milwaukee, Racine, and Wausau.

physician or by the official performing the marriage ceremony. Although for some sociological purposes this may be a better definition of "farmer" than that used by the federal Census, the two are not identical, and the amount and direction of the difference are not known. In all other cases, however, the occupation on each birth and marriage certificate was checked against the occupation of the father or husband listed in a city directory. Relatively few important occupational differences were found between the certificates and the directories and many of those that did occur were merely variant descriptions of the same job, e.g., a milk deliveryman was called a "salesman" in one place and a "truck driver" in another. These sources offered the great advantage of dealing directly with individual records rather than with the average rates by counties and other civil units which are all that are available in census publications. On the other hand, the data required that birth rates be related to fathers instead of to mothers and they did not allow the computation of age-specific rates. Because of the nature of the data, it is probable that birth rates are somewhat more accurate than marriage rates, and that comparisons of trends are more trustworthy than comparisons of levels. These facts should be borne in mind in the interpretation of the findings.

Farming Compared with Combined Urban Occupations. In every year of the decade 1924-1934, the birth rates of farmers were found to be approximately twice as high as the birth rates of men engaged in all urban occupations combined (Table 1). It is clear, however, that the base used in computing the farm rates was somewhat too small, because many births to farm laborers were undoubtedly recorded on birth certificates as births to farmers. If the number of births reported to farm laborers is added to the births reported to farmers, and an estimated 42,000 male farm laborers 20 years of age and over are included in the base, the ratio of the resulting agricultural birth rate to the combined urban occupational birth rate is approximately 1-3/5.⁴

⁴ On the strength of the evidence and in accordance with the most competent opinion, it was assumed that the number of farmers in Wisconsin remained about stationary between 1920 and 1935. Thus the average of the four census enumerations of 1920, 1925, 1930 and 1935, minus female farmers, was taken as the base in estimating all farm birth and marriage rates. Another chance for error lies in the possibility that the word "farmer" on the birth certificates may have included a larger or smaller number of part-time farmers than did the average census count. The importance of this objection may be tested to some extent by employing as a base for the farm birth rate the exceptionally large number of "farmers" reported by the farm census of 1935, which is generally believed to have been heavily inflated with part-time farmers and other open-country nonagricultural laborers not counted by earlier censuses. The result of this substitution, however, changes the ratio of the urban to the farm birth rate only about 3 percent, so that this source of error may be regarded as negligible.

It is interesting to notice that a preliminary sample estimate by the Federal Census Bureau shows a net reproduction rate of 1.42 for the rural farm population, and one of .85 for the urban population of Wisconsin in 1940. The farm rate is therefore 1 3/4 times as great as the urban rate. The net reproduction rate is not directly comparable with our crude birth rate, because

TABLE 1. URBAN OCCUPATIONAL BIRTH RATES PER 1000 ADULT MALES, AND FARM BIRTH RATES PER 1000 MALE FARMERS, OBSERVED AND STRAIGHT-LINE TREND, 1920-1936

Year	Urban Birth Rates		Farm Birth Rates	
	Observed ¹	Trend ¹	Observed	Trend ¹
1920	—	—	125.6	121.3
1921	—	—	—	—
1922	—	—	118.8	115.3
1923	54.1	55.2	—	—
1924	54.2	53.9	107.3	109.2
1925	53.1	52.5	—	—
1926	51.2	51.1	97.4	103.2
1927	50.2	49.7	—	—
1928	49.0	48.3	93.5	97.1
1929	47.1	46.9	—	—
1930	45.5	45.5	89.2	91.1
1931	43.6	44.1	—	—
1932	41.3	42.7	86.1	85.0
1933	40.5	41.4	—	—
1934	40.6	40.0	78.9	79.0
1935	39.5	38.6	—	—
1936	—	—	77.4	72.9

¹ Straight-line.

In Wisconsin, in 1923 there were 113.1 births per 1000 male farmers; by 1935 there were only 78.2. This was an average decrease of 2.6 percent per year, or 30.9 percent in 13 years. The birth rates for all urban occupations combined also experienced a heavy decline. Whereas in 1923 there were 54.1 births per 1000 urban adult males, by 1935 the number was only 39.5. This was a loss of 27.1 percent, and an average annual decrease of 2.3 percent. Thus, in terms of absolute rates, farm birth rates decreased faster than urban birth rates, narrowing the gap between the two by 20 births per 1000 males. In spite of this absolute difference, however, it is important to notice that the percentage decline of farm birth rates only slightly exceeded that of urban birth rates, the average annual percentage decreases in the two series being 2.6 and 2.3, respectively. However, Table 1 shows clearly the regularity of the decline in each series. With but two minor exceptions in

it includes mortality, holds constant sex and age composition, and indicates what the rate of natural increase *would be* if the birth and death rates of 1940 were maintained until the age composition of the population was stabilized. The net reproduction rates are useful for indicating the relative eventual rates of natural growth of the farm and urban populations under the assumptions mentioned; while our crude birth rates show the actual rates of reproduction of the two male occupational groups at the time indicated, due to all causes. In this case, it happens that the net reproduction rates indicate a greater difference between the two populations than do the crude birth rates, if we take $1\frac{3}{5}$ as the ratio for the latter. An inspection of trends shows that this cannot be attributed to the difference in the dates to which the two types of rates apply. It is rather because the net reproduction rates lower the urban and raise the farm rate by equating the larger proportion of young people of reproductive age in the cities to that on the farms and by taking account of a lower death rate in the farm population.

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the urban column, the birth rates for each year were lower than for the preceding year. Another indication of the steadiness of the decrease is the fact that the difference between the observed rates and the straight-line trends was never as much as six percent. Yet inspection reveals that in 1935 the observed rates in both series were higher than the corresponding straight-line trend values. This suggests that the long decline in fertility was about to give way, at least temporarily, to a general postdepression recovery, which actually occurred according to data since released by the Wisconsin Bureau of Vital Statistics.

Another significant point that appears from Table 1 is that the deviations from the trend of farm birth rates are correlated negatively with the deviations from the trend of urban birth rates. A reasonable explanation is that the net amount of migration from farms to cities of young adults in the most fertile age groups was a major, if not the chief, cause of variations from trends in both farm and urban birth rates. From 1924 to 1930, for example, the relatively high net migration from farms to cities of young adults evidently lowered farm birth rates and raised urban birth rates. During 1932, the stoppage of net migration from the farms must have produced exactly the opposite effects on farm and urban fertility. This calls attention to the necessity in the study of differential birth rates for carefully controlling the factor of migration from one population group to another, something that has not often been done. Indeed, it would seem to be even more basic to correct for intermigration where it occurs than for age and sex, which is conventional, because the very distinction between the groups under comparison is threatened by intermigration, whereas age and sex differences are often definitive of their groups.

Since the age of all women or of all men in each occupational group was not obtainable, the only way in which the age factor could be introduced in this study of birth rates was as mean age of mother or of father, taken from the birth certificates. The mean age of farm mothers over the period 1923-1935 was approximately one year older than that of all urban mothers. This is in agreement with the 1930 Census, which shows a larger proportion of younger women in the cities than on the farms. If the farm and urban age distributions were the same, the difference between the farm and urban birth rates would be somewhat greater than our crude birth rates.

Passing from a comparison of birth rates to a comparison of marriage rates, it appears that the mean annual marriage rates for farmers and for the total urban group over the period 1923-1935 are practically equal (Table 2).⁵ If the same corrections are made in the farm marriage rates as in the farm birth rates, so as to include farm laborers in the base, however, the

⁵ Strict marriage laws in Wisconsin have caused a rather large proportion of marriages of Wisconsin couples to be performed in adjoining states. Although the writers have made extensive efforts to determine the proper corrections, the reader is cautioned that our estimated crude marriage rates may still contain some error for that reason.

TABLE 2. URBAN AND FARM OCCUPATIONAL MARRIAGE RATES PER 1000
ADULT MALES, 1920-36

Year	Urban Marriage Rates	Farm Marriage Rates
1920	—	42.0
1921	—	
1922	—	31.4
1923	31.0	
1924	29.9	25.0
1925	29.6	
1926	29.2	24.0
1927	28.3	
1928	28.0	23.6
1929	26.8	
1930	24.4	23.4
1931	21.6	
1932	19.8	26.1
1933	23.9	
1934	29.1	32.1
1935	31.1	
1936		34.0

farm marriage rate falls below the urban. The urban marriage rate, like the urban birth rate, is bolstered by the presence in the cities of a disproportionate number of young people of marriageable age. According to our figures, which exclude farm laborers, marriage rates in the farm group were lower than those in the urban group from 1923 to 1930, but were higher during the remaining five years. The farm marriage rate was 31.4 per 1000 male farmers in 1922, fell to 25.0 in 1924, slowly declined to 23.0 in 1930, and then rose to a high of 34.0 in 1936. The farm marriage rate trend accordingly formed an almost symmetrical bowl-shaped curve. The urban marriage rate tended to drop faster and faster from a high of 31.0 in 1923 to a low of 19.8 in 1932, then returned to 31.1 in 1935, gaining back in three years all it had lost in nine. Thus the sharp drop from 1930 to 1932 in the urban marriage rate was accompanied by a substantial rise in farm marriage rates. One reason for this was again undoubtedly the great decline during this period in farm-to-city migration and the increase in city-to-farm migration. These migration changes chiefly involved young persons, who normally have high marriage rates. It is probable that the subsequent rise in farm marriage rates was influenced by the low rate of net farm-to-city migration as well as by the occurrence of previously postponed marriages. The control of the migration factor therefore appears to be highly important in the comparison of urban and farm marriage rates,⁶ as well as in the comparison of birth rates. It would be interesting to know what the farm and urban marriage rate trends would have been had there been no change after 1920 in the amount

⁶ Over this period, there was a negative correlation between the fluctuations in the mean age of urban grooms and those in the mean age of farm grooms, no doubt a further reflection of migration. The relationship was less strong, however, in the case of the mean age of brides.

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of farm and city migration. There is good reason to believe that they would have been much more alike—certainly urban marriage rates would not have registered such a severe decline during the first three years of the depression. Another factor that is generally believed to have caused some of the differences in the behavior of farm and urban marriage rates shown in Table 2 is the circumstance that the depression descended upon the farms in 1921, some eight years before it reached the city.

Variations Among the Urban Occupations. The crude birth rates of the urban occupations have four striking characteristics. The first is the great range among the occupations in birth rate levels at any given time. The second is the frequent change in rank among the occupations during the 13 year period. The third is the wide diversity among the occupations in birth rate trends, 1923-1935; and the fourth is the general downward trend of all birth rates (Table 3).

TABLE 3. BIRTHS PER 1000 ADULT MALES, ALL CITIES,¹ BY OCCUPATION, 1923-1935

Year	Mean	Occupation ²										
		1	2	3	4	5	6	7	8	9	10	11
1923	54.2	51.6	48.4	54.2	47.5	48.8	63.1	62.9	57.4	34.8	27.2	60.4
1924	53.9	51.3	45.8	53.5	47.7	48.7	62.7	63.9	55.7	33.9	27.5	62.1
1925	53.1	50.6	45.6	53.3	47.2	47.5	61.6	64.1	54.5	33.9	27.2	63.8
1926	51.4	50.3	46.4	51.9	47.9	46.3	60.2	61.6	51.4	35.8	26.2	61.2
1927	50.2	49.9	44.9	50.6	49.9	47.0	59.0	59.1	47.6	37.0	25.9	62.2
1928	48.8	48.8	45.5	48.5	49.7	47.2	56.6	58.3	45.7	35.1	26.2	61.9
1929	47.1	48.7	48.2	46.4	48.9	46.0	53.4	58.3	45.1	33.4	25.1	56.5
1930	45.4	49.6	49.2	44.0	49.0	44.9	50.0	57.4	45.6	33.5	23.5	54.8
1931	43.5	49.2	49.4	40.9	49.0	45.0	46.9	55.4	46.3	34.3	22.1	54.4
1932	41.7	46.4	51.2	37.8	45.8	45.6	44.7	54.7	46.1	35.6	21.2	55.4
1933	40.5	44.1	52.3	35.2	41.7	46.0	43.0	54.8	46.3	36.1	21.0	55.4
1934	40.1	44.3	51.3	33.9	40.4	45.7	42.3	54.5	48.5	35.2	21.2	51.2
1935	39.5	43.1	51.2	32.9	40.4	44.4	41.0	52.3	48.3	32.9	21.1	49.9

¹ Milwaukee rates smoothed by three-year moving average.

² Occupational code: 1, professional; 2, semiprofessional; 3, proprietor-and-official; 4, agent; 5, clerical; 6, skilled; 7, semiskilled; 8, unskilled; 9, domestic-and-personal-service; 10, not-classified; 11, indefinite.

It is remarkable that in each of the 13 years under review the highest occupational birth rate was over twice as great as the lowest. In 1923, the highest rate was 2.31 times the lowest and in 1935 the ratio was 2.48 to 1.

In terms of average crude birth rates over the period 1923-1935, the several urban occupational groups ranked as follows, from high to low: semiskilled (58.3), indefinite (57.6), skilled (52.7), unskilled (49.1), professional and semiprofessional (tie) (48.4), agent and clerical (tie) (46.5), proprietor-and-official (44.9), domestic-and-personal-service (34.7), and not classified (24.3). It therefore appears that in Wisconsin from 1923 through 1935, on the average, "overall" workers had higher birth rates than "white-collar" workers. Domestic-and-personal-service workers, a somewhat anom-

alous group, had the lowest birth rates recorded for any classified occupation. This occupational group is therefore more like the white collar class than the manual class in respect to the birth rate. Among overall workers, the birth rates of the semi-skilled and skilled exceeded those of the unskilled; among white collar workers, the birth rates of the professional and semi-professional were the highest, and the birth rates of the agent and clerical were above those of the proprietor-and-official. It is interesting to notice that the professional came closer to the unskilled laborer than to any other type of worker in the actual average number of births per 1000 adult males.

A glance at Table 3 shows, however, that there was a great deal of change in rank among the occupational groups between 1923 and 1935. Thus, the skilled workers had higher birth rates than any other group in 1923, but by 1935 were in seventh place, due to a sharp drop of 35 percent. Unskilled laborers began the period in fourth place, declined rapidly for a few years to ninth place in 1929, then recovered fourth place again in 1935. Agents started in eighth place, rose to fourth in 1929, and returned to eighth after 1932. The clerical group ranked seventh or eighth 1923-1932, fifth 1933-1935. Proprietor-and-official workers dropped from fifth place in 1923 to ninth or tenth place in 1935. A small class, the semiprofessionals, shifted from eighth or ninth position at the beginning of the period to second at the end. It thus appears that the ranking of the various urban occupational classes in respect to their crude birth rates may be unstable and subject to rapid and apparently erratic changes even within a short period, at least when the period includes a major economic depression.

In view of the previously mentioned decline of 27 percent in the mean weighted birth rate of all urban occupations, the general trend of urban occupational birth rates is known to be downward. In spite of the many vagaries mentioned above, this downward trend is quite consistent from one occupation to another. All but one occupation, the relatively unimportant semiprofessional, had a lower birth rate in 1935 than in 1923; and each year a majority of occupations had birth rates lower than in the year previous.

The two occupations with the most outstanding *percentage* birth rate declines were the proprietor-and-official and the skilled. This is a bit surprising, as one is composed of "white-collar" workers and the other of "overall" workers. They do have one thing in common—each is the best paid group in its category. The birth rate of proprietors-and-officials decreased 39 percent from 54.2 births per 1000 adult males in 1923 to 32.9 in 1935; the birth rate of skilled laborers declined 35 percent, from 63.1 births per 1000 adult males in 1923 to 41.0 in 1935. These are heavy losses within a short time. The birth rates of these two occupations also showed the same pattern of decline—gradual the first and last few years of the period, precipitous in the middle years. The professional, semiskilled, and unskilled each had birth rate decreases of between 16 and 17 percent, which are less than half those of proprietors-and-officials or skilled laborers. But the trend in the professional

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and semiskilled classes was consistently downward, while that of the unskilled workers declined rapidly from 57.4 in 1923 to 45.1 in 1929, then rose to 48.3 in 1935. Of the major occupations, the clerical experienced the least decline in birth rates, only nine percent. From 1923-1925 to 1933-1935, the birth rates of all "overall" occupations together declined about 19 percent, while all "white-collar" occupations⁷ declined nearly 23 percent, a difference of less than four percent. Domestic-and-personal-service was atypical, the birth rates of this group remaining nearly unchanged.

Since urban males have here been classified into an unusually large number of occupations, the question arises whether so many classes are justified. To test this, the Chi-Square test⁸ was used. The probability that the birth rate values of any two occupations could have been random samples from the same universe was less than one percent in all but two cases. Between the professional and agent occupations, the probability was about ten percent. This was not considered sufficient reason for combination, however, because other fundamental sociological differences occurred between them. For example, there was a substantial difference between the two occupations in married birth rates and in marriage rates. The difference between the birth rates of the semiskilled and the indefinite occupations was also far from significant, but the latter included men who in many respects were quite unlike semiskilled workers. Rather than combine the two, we should prefer to omit the indefinite class altogether.

To what extent were the great differences in birth rate levels and in birth rate trends noted above among the urban occupations the result of differences or changes in the age composition of wives? To answer this question, the only age factor available in this study—age of mother—was first correlated with birth rate levels by occupation for each year between 1923 and 1935, inclusive. All correlations proved to be quite small, and 11 of the 13 were positive! That is, there was a slight tendency for an occupation with a high mean age of mother to have a high birth rate level, and for an occupation with a low mean age of mother to have a low birth rate level. It therefore appears that the striking differences between urban occupational birth rate levels must have been due to factors other than inequalities in the age of mothers, and to the extent that mean age of mother is an index of the age of all married women, the latter would also fail to explain the differences. A similar test applied to birth rate trends led to the same inference. This is not surprising because there was little change in mean age of mother in most of the occupations over the period 1923 to 1935.

Crude marriage rates, like birth rates, varied widely between the nine urban occupations in both level and in trend, sank very low during the depth of the depression and recovered rapidly after 1932 (Table 4).

The spread of the marriage rate levels of the six major urban occupa-

⁷ Domestic-and-personal-service is not included in this category.

⁸ For details, see R. A. Fisher, *Statistical Methods For Research Workers*, Chap. IV.

tions was so great that the highest rate, that of the clerical, was over twice that of the lowest, the proprietor-and-official, throughout the 13-year period, 1923-1935. During most of this time the semiskilled and the professional ranked second and third, respectively, in marriage rate level, and they were followed by the skilled. The unskilled was fifth until after 1931 when it ranked fourth. In spite of marked differences between individual occupations, therefore, on the whole marriage rate levels did not differentiate between the "white-collar" and "overall" categories.

TABLE 4. MARRIAGES¹ PER 1000 ADULT MALES, NINE CITIES, BY OCCUPATION, 1923-1935

Year	Mean	Occupation ²										
		1	2	3	4	5	6	7	8	9	10	11
1923	31.0	32.0	56.9	23.6	28.7	42.0	34.1	38.0	23.6	23.2	16.2	39.1
1924	29.9	28.8	54.0	22.6	26.8	38.9	32.9	37.6	22.6	21.6	16.6	41.7
1925	29.6	32.2	53.3	22.2	27.7	39.1	31.5	37.1	23.0	21.0	17.0	39.2
1926	29.2	36.6	52.1	21.2	29.4	40.3	30.3	35.8	23.1	19.6	17.0	32.7
1927	28.3	38.2	48.7	19.9	25.4	42.0	29.1	33.7	23.0	18.7	16.0	30.9
1928	28.0	37.9	49.4	18.8	21.4	42.9	28.2	33.0	22.7	20.2	16.6	34.4
1929	26.8	33.9	54.0	17.5	22.3	39.1	26.8	33.2	21.5	21.2	16.7	31.5
1930	24.4	30.7	55.1	16.1	23.4	34.3	24.1	31.8	19.9	20.0	13.9	24.9
1931	21.6	28.8	47.5	15.0	20.7	31.1	20.0	28.9	19.2	20.5	11.7	21.9
1932	19.8	27.3	36.3	14.0	16.9	29.7	16.4	27.0	19.2	21.4	11.8	21.3
1933	23.9	30.0	40.8	15.5	20.3	35.9	20.7	34.7	23.7	24.7	13.5	27.1
1934	29.1	32.8	51.3	17.9	25.8	44.1	26.2	43.2	28.9	29.2	15.7	37.0
1935	31.1	33.7	50.6	18.8	25.1	44.6	29.4	44.0	31.3	31.1	18.0	41.3

¹ Including estimated out-of-state marriages.

² Occupational code: 1, professional; 2, semiprofessional; 3, proprietor-and-official; 4, agent; 5, clerical; 6, skilled; 7, semiskilled; 8, unskilled; 9, domestic-and-personal-service; 10, not-classified; 11, indefinite.

Previous to 1929, there was the utmost diversity in marriage rate trends among the different occupations. Some were upward, some were almost level, others were downward. Furthermore, some of the trends were exceedingly irregular, others surprisingly regular. From 1929 to 1931, however, the marriage rates of all six of the major occupations declined. The same was true for five of these occupations from 1931 to 1932. From the low point of 1932, the marriage rates of all the major occupations rose very rapidly until 1934 and then less rapidly, in the case of most, the following year. The marriage rates of the "overall" occupations, the skilled, semiskilled, and the unskilled, staged the most rapid and extreme recovery from the effects of the depression, all but the skilled workers rising by 1935 to levels much above any reached before in the 13-year period. The proprietor-and-official and skilled had considerably lower marriage rates in 1935 than in 1923. Professionals fell between these two extremes with a marriage rate at the end of the period slightly above that at the beginning.

The proprietor-and-official group had the highest mean age of groom throughout the period 1923-1935. The mean age for 1930 was 30.4 years, for 1935, 31.2 years. The professional occupation was second with 29.5 years in both 1923 and 1935. The skilled workers were third oldest, averaging 28.2 years in 1923 and 29.4 years in 1935. Unskilled laborers began at 28.7 years in 1923 and ended at 27.8 years in 1935. The clerical and semiskilled had lower mean ages of groom than any other major occupations. The trend for the clerical occupation increased irregularly from 26.2 years in 1923 to 27.1 in 1935; that for the semiskilled increased from 26.4 years in 1923 to 27.0 in 1935. Thus for most occupations the mean age of groom was greater in 1935 than in 1923. This is further evidence that the men who did not marry during the peak of the depression tended to marry later as business conditions improved. The depression delayed marriages but there are no indications that it reduced total marriages during the 13-year period.

Correlation between Occupational Birth Rates, Marriage Rates, and Indices of Business Conditions. The marriage and birth rates of each occupation, including farming, were correlated with indices⁹ of business conditions, all as deviations from trends. In the urban occupations lumped together, marriage rates were found to be fairly sensitive to economic change ($r = .73$). Urban birth rates were closely related to urban marriage rates ($r = .84$); but economic conditions apparently had little effect upon variations in total urban fertility except indirectly through their influence upon marriage rates ($r = .49$). Changes in farm economic conditions over time had no significant influence upon either farm birth rates ($r = -.37$) or farm marriage rates ($r = -.18$). A correlation by counties in 1929 also failed to show that farm birth rates were significantly associated with the value of farm products by counties ($r = .17$).

Correlation coefficients (r 's) between the birth rates of the separate urban occupations and the urban economic index ranged from .63 for the proprietor-and-official group to $-.48$ for the semiprofessional. The skilled, professional, and agent occupations had correlations between .39 and .45. For the semiskilled, unskilled, domestic-and-personal-service, and clerical classes the coefficients were .04, $-.33$, and $-.37$. These results suggest that the birth rates of the several urban occupations not only reacted quite differently to changes in business conditions but that on the whole the rela-

⁹ The index of urban economic conditions was a weighted mean of weekly earnings, weekly payrolls, and an index of employment in the nine Wisconsin cities, published by the Wisconsin Industrial Commission in *The Wisconsin Labor Market*. This index was put on a per capita basis, and deflated by the cost of living figures for Chicago and Minneapolis appearing in *Changes in the Cost of Living*, December 15, 1937, by the United States Bureau of Labor Statistics. The index of changes in agricultural prosperity consisted of estimates of gross farm income in Wisconsin, deflated by an index of prices paid by Wisconsin farmers, both taken from a publication of the Wisconsin Crop Reporting Service, *Wisconsin Agriculture*, Statistical Bulletin No. 188, May, 1938.

tionships between birth rates and the economic index were slight and largely random. Only the proprietor-and-official class showed any clear tendency to adjust the birth rate to the business outlook.

The marriage rates of the several urban occupations were much more closely and consistently related to changes in economic conditions than were their birth rates. The major occupations and their coefficients are: professional, .59; proprietor-and-official, .61; clerical, .73; skilled, .76; semiskilled, .60; unskilled, .63. The relatively small spread in the size of these coefficients suggests that the effect of the changes in economic conditions upon marriage rates was much the same from one of these occupations to another.

Although the correlation between birth rates and marriage rates for all of the urban occupations combined was as high as .84, the major urban occupations taken alone showed small and erratic coefficients, ranging from -.02 in the case of clerical to .62 in the case of skilled workers, and about .30 in most cases. We believe that these vagaries would be reduced if refined marriage and birth rates were used. Some support for this opinion is furnished by the correlations between the marriage rates and the birth rates calculated only for the married men in the occupations. All of these correlations were higher in the positive direction than the corresponding correlations between marriage rates and the ordinary birth rates. These differences must be due mainly to the fact that the married birth rates eliminated the effects of differential changes in the marital composition of the occupations.

Since marriage rates were correlated with the economic index and birth rates with marriage rates, it is of interest to try to answer the question whether the correlation between the economic index and the birth rate was chiefly an indirect relationship operating through the medium of the marriage rate. The method of multiple correlation was used to test this, taking the birth rate as the dependent variable. The data for all the urban occupations were combined for the purpose. The multiple correlation coefficient between birth rates, marriage rates, and the economic index was $R = .87$. Since this is only slightly higher than the .84 gross correlation (r) between birth rates and marriage rates, it appears that the economic index had practically no effect upon birth rates except as it affected marriage rates.

Summary. In the state of Wisconsin during the period 1920-1936, considerable real differences in birth and marriage rates were found not only between farmers and city males, but also between men in different urban occupations. These differences occurred both in levels and in trends and were so marked that urban males must be classified into nine or ten occupational categories in order to avoid mixing occupations with obviously unlike demographic characteristics.

Farm birth rates were much higher (at least $1\frac{3}{5}$) than aggregate urban birth rates. Both declined between 1920 and 1935 in about the same proportion, but absolutely the gap between the two was narrowed by 20 births per

1000 adult males. Birth rates in city and country showed a tendency to recover a little from the depth of the economic depression in 1932. Farm and city marriage rates were much the same in average level and in trend over the 13 year period, except that the farm rates did not fall so low in the depression and turned up a year or two earlier. Comparisons between all urban and farm rates were confused by migration between the two areas.

When the nine specific urban occupations were compared among themselves, there appeared a great range in birth rate levels, frequent change in rank with respect to these levels, and wide diversity in birth rate trends, but all showed a general downward tendency. The highest birth rates occurred among the "overall" occupations as a group. At the top of the "white-collar" category in birth rate level was the professional group, at the bottom the proprietor-and-official. The heaviest percentage decline over the period was registered by the proprietor-and-official class and by skilled laborers. The total percentage decline was only slightly larger in the "white-collar" class (23 percent) than in the "overall" class (19 percent).

It is probable that differences in the practice of birth control was the primary factor producing the striking diversity among occupations in birth rate levels and trends, but other factors of importance which this study could not determine were also certainly operative. The mean age of mother, the only age control available, showed slight correlation with either birth rate levels or trends, and so cannot explain the great differences noted.

Marriage rates also varied widely among the urban occupations. The highest rates occurred in the clerical group, the lowest in the proprietor-and-official group. Marriage rate levels did not differentiate between the "white-collar" and "overall" categories in the aggregate. In marriage rate trends, however, marriage rates of the "overall" class recovered faster than those of the "white-collar" class after 1932. Only the proprietor-and-official group and skilled laborers had lower marriage rates in 1935 than in 1913.

Marriage rates were somewhat sensitive to changes in business conditions in the cities, but not on the farms. Most of the effects of the depression on the urban birth rate were exerted indirectly through the marriage rate, while no influence at all could be detected on the farm birth rate. Here again the factor of migration between farm and city interfered to some extent with the analysis.

City directories can be of great value in this kind of investigation by providing occupational bases for cities. Their chief limitations are: (1) a great amount of clerical labor is needed to produce reliable results; and (2) the age factor cannot be adequately controlled. Although age control is not desirable for every purpose, inability to use it where needed of course constitutes a serious weakness.

FERTILITY OF MORMONS IN UTAH AND ADJACENT STATES*

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IN RECENT years several students of population¹ have investigated the fertility differentials existing among the Catholics and Protestants. The results of their studies indicate that Catholics have higher birth rates than Protestants. In addition, these studies point out that fertility among both religious groups is declining; the decline being greater, it appears, for the Catholics.

As far as the birth rate is concerned, it seems that religion is losing its influence when it comes in contact with certain socioeconomic conditions. Whether there is, however, a definite causal relation between religious profession and the birth rate, the evidence in the studies is not sufficient to decide. Nevertheless, there seems to be a tendency to minimize the importance of religion and to accept the idea that the social conditions confronting modern parents constitute the major determinants of family size.

The Mormons have been noted for their large families,² but whether this

* For more complete exposition of data see William A. DeHart, "The Relation of Religious Affiliation to Population Fertility in Utah and Selected Counties in Adjacent States," unpublished thesis in University of Minnesota Library.

¹ Warren S. Thompson, "Size of Families from Which College Students Come," *J. Amer. Statist. Assn.*, Dec. 1925, 20: 481-95; A. J. Jaffe, "Religious Differentials in the Net Reproduction Rate," *J. Amer. Statist. Assn.*, June 1939, 34: 335-342; S. A. Stouffer, "Trends in the Fertility of Catholics and Non-Catholics" *Amer. J. Sociol.*, Sept. 1935, 41: 143-66; Gilbert Kelly Robinson, "The Catholic Birth Rate: Further Facts and Implications," *Amer. J. Sociol.*, May 1936, 41: 757-66; S. J. Holmes, "The Size of College Families," *J. of Heredity*, Oct. 1924, 15: 407-15.

² Several investigators have noted the high fertility of the Utah population and commented on the fact. Thompson makes the following observation:

"The ratio of children to native-white women in Utah is so anomalous in every respect that it deserves special mention. Salt Lake City ranks highest among cities over 100,000 in ratio of children to all native-white women and fourth in ratio of children to all native-white married women. Ogden, the only city in the state having 25,000 to 100,000 population, ranks 2 in ratio of children to all native-white women and 8 in ratio of children to all native-white married women. In the ratio of children to all foreign-born married women, it ranks 64.

"Turning to the ratios of children to native-white women among the smaller communities (cities of 10,000 to 25,000, of 2500 to 10,000, and rural districts), we find that Utah ranks first both for all women and for married women in all these communities. Furthermore, if our comparison is by States, Utah also ranks first in the two groups of large cities. That it does not rank first when the states, as a whole, are under consideration is due to the fact that it has a considerably larger urban population than some of the Southern States which approximate it rather closely in their rural ratios."

Thompson concludes "that the clearest case of the influence of religion in keeping the birth rate high . . . is to be found among an old native stock in a native form of religion." . . . Warren S. Thompson, *The Ratio of Children to Women, 1920*, Bureau of Census, Washington, D. C., 1931, pp. 135 and 136.

is a result of religious influences or simply a derivative of frontier conditions and other socioeconomic factors has not been clearly demonstrated. This study represents an attempt to test the hypothesis that affiliation with the Mormon Church is associated with high fertility when other factors are controlled.

For this study, sixty counties located in the Central Intermountain area are used. Twenty-eight counties are located in Utah, twenty-six in Idaho, three in Wyoming, and three in Nevada. The counties selected in border states were those having the highest Mormon population.

Inasmuch as differentials in fertility are related to a number of psychological and social conditions, it becomes difficult to isolate the importance of any single factor. This study, however, is greatly simplified by the fact that the culture of the people living in this Intermountain area is relatively homogeneous in some respects, and where there is marked fluctuation among counties of certain relevant social conditions which determine the birth rate, quantitative data is available in Census Reports that make it possible to control these variations statistically by use of the partial correlation technique.

Using the standard deviation as a measure to indicate the cultural uniformity of this region, we find in the case of illiteracy that approximately two thirds of the counties vary less than .9 percent from the mean.³ For the percentage attending school between the ages of fourteen and fifteen, the standard deviation is 2.5 percent and only slightly higher (2.9 percent) in the case of the foreign-born inhabitants of the counties. The races other than white are unimportant in this region except for San Juan County, Utah, where 41 percent of the population is Indian. This county was omitted from the study.

The variation between the sixty counties for the variables described above is so small that they can be considered as relatively constant factors and may be disregarded in further analysis by the partial correlation formulas. There is, however, a wide variation among counties in regard to the number of urban residents and nonfarm population, the plane-of-living index, and the percentage of Mormon population.

Owing to the fluctuation of the proportion of Mormon residents among the counties, this variable is well-adapted to the study of the influence of

³ The data were obtained from: *Fifteenth Census of the United States (Population)*, Vol. III, Part I, 566-568, and Vol. III, Part II, 1099-1100; *Fifteenth Census of the United States (Population)*, Vol. III, Part I, 562-565, and Part II, 1096-98; data from Records of the Works Projects Administration, Washington, D. C. (the author is indebted to the assistance of Conrad Taeuber and Lowry Nelson for this information which gives, by counties for 1930, (a) the fertility ratios of the rural-farm and nonfarm population, (b) the plane-of-living index, (c) farm tenancy, and (d) land value per capita farm population); *Census of Religious Bodies*, 1926, pages 595, 643, 692, 705. County populations for 1926 were estimated by linear interpolation and were then used to calculate the percentage of county populations that was Mormon.

the Mormon culture on fertility. It has a range of 97 percent out of a possible 100 and a standard deviation of 29.6 percent.

There is, also, considerable difference among counties in the plane-of-living of farm families. For the combined rural-farm and nonfarm population, the index⁴ of the plane-of-living ranges from 59 to 222, and for the rural-farm population, its range is from 44 to 254. The extreme high and low fluctuations in the plane-of-living index are found mainly in the state of Utah.

As to the urban population, its variation among counties is significant, and it should be pointed out that more than one half of the population in Utah lives in urban areas.

To permit a more complete control over the various social conditions related to the size of the family and to further validate the results of the correlations of the fertility ratios to the proportion of Mormon residents inhabiting the counties, the sixty counties were subdivided on the following basis: In regard to the composition of the population, they were divided into twenty-seven counties which had an urban population and thirty-three rural counties having no towns with more than 2500 population; geographically and politically, the counties were divided between twenty-six counties in Idaho and twenty-eight counties in Utah; another combination of counties constitute thirty-eight which were selected on the basis of their containing the highest and lowest percent L.D.S. population.

TABLE 1. COEFFICIENTS OF CORRELATION BETWEEN FERTILITY RATIO (1)¹ AND SELECTED INDICES FOR TWENTY-EIGHT COUNTIES IN UTAH

Percent L. D. S. ² (2) ¹	Plane-of-Living Index (3) ¹	Percent Urban (4) ¹
$r_{12} = .23$		$r_{14} = -.66$
$r_{12.3} = .57$	$r_{13} = -.63$	$r_{14.2} = -.67$
$r_{12.4} = .30$	$r_{13.2} = -.76$	$r_{14.3} = -.59$
$r_{12.34} = .58$	$r_{13.24} = -.71$	$r_{14.23} = -.59$

¹ Symbols for Correlation Coefficients: 1=Fertility Ratio; 2=Percent L. D. S. Population; 3=Plane-of-Living Index; 4=Percent Urban Population.

² L. D. S. is the abbreviation for the Church of Jesus Christ of Latter Day Saints, the official name of the church popularly called Mormon.

The results of study of each subdivision of the sixty counties will be summarized at the end of the article. First, consideration will be given to the twenty-seven counties of Utah.

⁴ The plane-of-living index is a relative measure of the economic position and standard of living maintained by the rural families. The following census material is used in its calculation: "The average value of the farm dwelling, the percent of farms having automobiles, the percent of farm homes having electric lights, the percent having running water piped into the house, the percent having telephones, and the percent having radios." A. R. Mangus, *Rural Regions in the United States*, W.P.A. Special Report, Washington, D. C., 1930, page 79.

In commenting on the "Ratio of Children to Women in Utah for Communities of Any Size," Thompson concludes "That Mormonism is the chief influence keeping the birth rate of Utah communities above the surrounding states cannot be questioned, and Utah is the best example in the United States of a community in which religion does exercise a decided influence on the birth rate."⁵ Sanford Winston, in correlating fertility with illiteracy in the United States, omitted Utah "Because the high birth rate was so clearly a departure from the normal due to the influence of the Mormon culture."⁶

Accepting these assumptions that the predominance of the Mormon people in Utah affords a ready and singular explanation of the high birth rate, the writer expected to derive a high correlation between fertility and the proportion of L. D. S. residents in the counties. The correlation results show, however, that Utah has, of all subdivisions of the sixty counties, the least association between religious affiliation and fertility. In considering the zero order coefficient ($r_{12} = .23 \pm 12$), there is little indication of the importance of religion. The small positive relationship that does exist could be due to chance or a number of hidden factors. The influence of urbanization is much more important ($r_{14} = -.66$), or the plane-of-living ($r_{13} = -.63$).

A more careful analysis of social conditions in Utah points to at least three social factors which explain the high birth rate. They are: (1) The presence of a large non-Mormon mining population in the state; (2) the factor of cultural isolation in conjunction with a predominant rural population in many counties; and (3), the presence of a large L. D. S. population.

The northern counties of Utah are an important center of commerce, trade, and industry. They are more prosperous and more urbanized than the southern and eastern counties. The plane-of-living index for the rural-farm population in the northern industrial counties is more than twice the national average. In eight of these counties, it is above 200; while in the more remote counties to the east and to the south, the plane-of-living index goes below the national average. The extreme limits of the index numbers are 32 for San Juan county in the southeastern corner of the state and 254 for Davis county located in the center of the industrial counties of the northern section of Utah.

Table 2 explains some interesting facts. The ratio of children to women is highest in the counties where isolation is most complete. Five counties on the eastern border of Utah have a comparatively low percentage of Mormon population (40) and a high fertility ratio (677); while nine counties in the northern section of Utah have a high percentage of Mormon population (80) and a much lower fertility ratio (567). The fertility ratios, however, of six predominantly Mormon counties (85 percent) in the southern part of Utah are higher than any of the other combination of counties.

⁵ W. S. Thompson, *Ratio of Children to Women*, p. 135.

⁶ Sanford Winston, *Illiteracy in the United States*, p. 86.

TABLE 2. NUMBER OF CHILDREN UNDER FIVE PER 1000 WOMEN AGED 15-44 THE PLANE-OF-LIVING INDEX AND THE PERCENTAGE OF MORMONS IN THREE MINING COUNTIES, SIX ISOLATED COUNTIES PREDOMINANTLY MORMON, FIVE ISOLATED COUNTIES PREDOMINANTLY NON-MORMON, AND NINE NORTHERN URBAN-INDUSTRIAL OR SEMI-INDUSTRIAL RURAL COUNTIES, 1930

Counties in Utah	Percentage of Mormon Population 1926	Plane-of-Living Index for the Rural Population 1930	Number of Children under 5 years of Age Per 1000 Women Aged 15-44 1930
6 Southern Counties (Isolated)	85	81.3	749
9 Northern Counties (Urban-Industrial or Semirural Industrial)	80	180.3	567
3 Mining Counties	48	135.6	605
5 Eastern Counties (Isolated)	40	66.6	677

Three of the most important mining counties have a Mormon population of less than fifty percent and a fertility ratio which is much higher than the northern urban-industrial counties.

It is seen that the plane-of-living⁷ is low in the isolated counties, medium in the mining counties, and high in the urban-industrial counties. The fertility differentials in this region are related more to the social conditions reflected in this index than they are to the number of Mormons living in the counties. It is probable that if this factor were controlled, the influence of the L. D. S. religion would become much more apparent. The positive association for instance, of the percentage of Mormon population with the plane-of-living index is rather significant ($r_{23}=.31$). When the plane-of-living is controlled, therefore, there is a noticeable increase in the correlation of the L. D. S. population with fertility ($r_{12.3}=.57$).

TABLE 3. CORRELATION COEFFICIENTS BETWEEN FERTILITY RATIO (1)¹ AND SELECTED INDICES FOR TWENTY-SIX COUNTIES IN IDAHO

Percent L. D. S. Population (2) ¹	Plane-of-Living Index (3) ¹	Percent Urban Population (4) ¹
$r_{12} = .68$	$r_{13} = -.12$	$r_{14} = .02$
$r_{12.3} = .69$	$r_{13.2} = -.24$	$r_{14.3} = .06$
$r_{12.4} = .69$	$r_{13.24} = -.20$	$r_{14.2} = -.19$
$r_{12.34} = .70$		$r_{14.23} = -.14$

¹ See Table 1, footnote 1.

⁷ The Plane-of-Living Index, while it refers specifically to the rural population, indicates fairly well the extent to which a county has become urbanized and industrialized.

As compared with border states, Utah is the only region where the number of urban residents in the county and the plane-of-living index has a higher correlation with fertility than the percentage of Mormon population. For all the other combinations of counties, the percentage of Mormon population shows the highest association with fertility of all the variables concerned.

In comparing the correlation coefficients of Utah with those of the twenty-six counties in Idaho, one observes a very striking contrast which, when analyzed, strengthens the evidence that religion is a relevant stimulus to family size. In Utah, the degree of correlation of fertility with the percentage of urban population and the plane-of-living is high in every case, while the degree of correlation is low in regard to the percentage of Mormon population. In Idaho, it is just the opposite. The number of Mormon residents of the counties correlates high in all cases with fertility and there is only a slight perceptible correlation of the plane-of-living index and the percentage of urban population with fertility.

In one state, the existing social conditions obscure the influence of the church as a factor which determines changes in fertility. In the other state, except for the percentage of Mormon residents in the counties, the existing social conditions have but a slight correlation with the fertility differentials. To obtain an idea of the importance of religion on fertility in Utah, a statistical control is necessary, while it is unnecessary in the case of the twenty-six counties in Idaho.

A marked contrast in the social conditions between the two states explains the differences in the correlation results. In Utah, there happens to be a vast difference in the social conditions found in the northern section of the state in contrast to those which are found in the south and southeastern area. There is the difference of urban-industrialized counties as against rural counties, counties having an exceedingly high plane-of-living in contrast to counties where it is exceptionally low. There is in the northern part of the state an abundance of commerce and many lines of communication. In the south, to a certain extent there is cultural and geographic isolation. In the Idaho counties, the cultural and geographic conditions are much more homogeneous.

In Utah, the counties cover, in the main, large geographic areas which permit each county to reflect most satisfactorily the influence of the dominant culture traits within it. The counties in Idaho are so small that county boundaries undoubtedly fail to delimit clear cultural distinctions between counties. The religious culture in a community, however, limits its influence essentially to those who profess the particular faith. In regard to these counties in Idaho, this fact seems to be clearly illustrated by the correlation results obtained. Religion is the only factor that has a significant correlation with fertility.

These correlation results derived from the county populations in Utah

and Idaho are perhaps sufficient to indicate a clear relation between religious affiliation and the birth rate. In regard to the importance of religion, more convincing evidence is obtained, however, by a selection of other combinations of counties which permit a greater control of the social factors modifying the birth rate and which, by the selection, increases the range and difference of variability in the percentage of Mormon population among counties.

TABLE 4. CORRELATION COEFFICIENTS BETWEEN FERTILITY RATIO (1)¹ AND SELECTED INDICES OF SIXTY COUNTIES IN THE INTERMOUNTAIN REGION AND THREE SELECTED SUBDIVISIONS OF THESE SIXTY COUNTIES

Percent Mormon Population (2) ¹	Plane-of-Living Index (3) ¹	Percent Urban Population ² (4) ¹
Total 60 Counties		
$r_{12} = .67$	$r_{13} = -.25$	$r_{14} = -.21$
$r_{12.3} = .79$	$r_{13.2} = -.60$	$r_{14.2} = -.46$
$r_{12.34} = .82$	$r_{13.24} = -.55$	$r_{14.24} = -.36$
27 Urban Counties		
$r_{12} = .58$	$r_{13} = .02$	$r_{14} = -.19$
$r_{12.3} = .63$	$r_{13.2} = -.30$	$r_{14.2} = -.44$
$r_{12.34} = .71$	$r_{13.24} = -.32$	$r_{14.23} = -.48$
33 Rural Counties		
$r_{12} = .74$	$r_{13} = -.35$	$r_{14} = .19$
$r_{12.3} = .88$	$r_{13.2} = -.74$	$r_{14.2} = -.10$
$r_{12.34} = .86$	$r_{13.24} = -.75$	$r_{14.23} = -.22$
38 Extreme Counties		
$r_{12} = .77$	$r_{13} = -.24$	$r_{14} = -.11$
$r_{12.3} = .85$	$r_{13.2} = -.62$	$r_{14.2} = -.49$
$r_{12.34} = .88$	$r_{13.24} = -.61$	$r_{14.23} = -.40$

¹ See legend to Table 1, footnote 1.

² The percentage of urban population only for the 27 urban counties. For the total 60 counties and the 38 extreme counties, one-half the percentage of nonfarm population was added to the percentage of urban population, and for the 33 rural counties, the percentage nonfarm population is used.

In the main, the Mormons are concentrated in Utah. There are only a few counties in Idaho which have a large Mormon population. Therefore, when counties of Utah and Idaho are combined, the range and variability in the percentage of Mormon population is increased considerably. As this difference in variability becomes greater, the fertility ratios show a corresponding change and the degree of correlation between the percentage of Mormon

population and fertility is increased. This is well illustrated in Table 4. These coefficients are all higher than similar ones obtained in correlating fertility with the percentage of Mormon population in the counties of Utah and Idaho. For the total sixty counties, the correlation is $r_{12.34} = .82$. When a selection is made from these sixty counties of those which have the highest and lowest number of Mormon inhabitants, the correlation of fertility with the Mormon population is further increased ($r_{12.34} = .88$). In selecting out the thirty-three rural counties, the factor of urbanization is eliminated and a better control is obtained over the variables which might modify the birth rate. For these rural counties, there is also a large increase in the degree of correlation of fertility with the proportion of Mormon inhabitants in the counties. Even in the twenty-seven urban counties where the factor of urbanization is most pronounced, the correlation of fertility with the Mormon population is greater than it is for any other variable. It becomes increasingly clear that prediction of fertility changes in this Intermountain Region can be made with greatest accuracy from a knowledge of the proportion of L. D. S. residents in the counties.

The plane-of-living index has a very slight negative correlation with fertility. It is not until the factor of religion is controlled that its importance is recognized. The reason for its low negative association with fertility is due to a positive correlation of the Mormon population with the plane-of-living index, which, in the case of the twenty-seven urban counties, is .42. This will explain the unexpected positive correlation ($r_{13} = .02$) of the plane-of-living index with fertility.

Last of all, a specific study will be made of the rural-farm and the non-farm population. Unfortunately, the Mormon membership can be obtained only for the total population of the county. It would appear, therefore, rather questionable whether the rural-farm and the nonfarm groups can be made objects of specific study. However, if the number of Mormon people remained proportionally the same throughout the rural-farm and nonfarm population as it did for the total population of the county, the question of being able to use these two rural groups in correlating religious affiliation with fertility would be answered. There is no certain proof, unfortunately, that such a condition prevails. The best thing that can be done in studying these two groups is to select those counties which hold at a minimum the possibility of any variation occurring between the Mormon inhabitants in the rural-farm and nonfarm division of the county population. It is evident that the chances for variation are less in those counties where the percentage of Mormon inhabitants is greatest than in those counties where it is least.

The thirty-eight extreme counties contain twenty-one counties with a population which is over 70 percent Mormon and seventeen counties with a population which is less than 30 percent Mormon. The correlation coeffi-

TABLE 5. CORRELATION COEFFICIENTS BETWEEN FERTILITY (1)¹ AND THE MORMON POPULATION FOR TOTAL COUNTY POPULATION, FOR THE RURAL-FARM, AND NONFARM POPULATION IN 33 RURAL COUNTIES AND 38 COUNTIES HAVING THE HIGHEST AND LOWEST PERCENTAGE OF MORMON POPULATION

Total County Population (r^1)	Rural-Farm Population (r)	Rural-Nonfarm Population (r)
33 Rural Counties		
$r_{12} = .74$ $r_{12,3} = .88$	$r_{12} = .79$ $r_{12,3} = .80$	$r_{12} = .69$ $r_{12,3} = .75$
38 Extreme Counties		
$r_{12} = .77$ $r_{12,3} = .85$	$r_{12} = .76$ $r_{12,3} = .88$	$r_{12} = .90$ $r_{12,3} = .91$

¹ See Table 1, footnote 1 for meaning of r -subscripts.

cients involving the Mormon population and the fertility ratios of the thirty-eight extreme counties are compared to similar coefficients derived from the thirty-three rural counties (See Table 5).

The correlation results found in this table indicate that the distribution of the Mormons among the rural-farm and nonfarm division of the population must be relatively equal. This is particularly true of the thirty-eight extreme counties where the direct correlation of fertility with the plane-of-living index and the percentage of Mormon population of the rural-farm and the nonfarm population exceeds similar correlation coefficients made in regard to the total county population.

The rural-farm and nonfarm population represents a rather homogeneous culture group where there is set up an ideal controlled situation. In the study of these groups, occupation and urbanization are most effectively controlled, while an adequate statistical control is obtained over the economic status and plane-of-living of the rural family insofar as these conditions are measured by the plane-of-living index. For the rural-farm population, farm tenancy and other correlated variables with fertility are found in census data that describe rather completely the cultural conditions which are influential in determining the size of the rural family. Table 6 lists four cultural indices which are related to the changes in fertility of the rural-farm population.

From Table 6, it is seen that social conditions, other than the factor of religion, are more favorable to family limitation in the predominantly Mormon counties. Farm tenancy in these counties is lower and the plane-of-living is much higher while the land value per capita farm population is about equal. The fertility ratio is, nevertheless, much higher for the counties which have the highest proportion of L. D. S. inhabitants.

TABLE 6. THE DIFFERENCE IN THE PERCENTAGE OF MORMON POPULATION, THE FERTILITY RATIOS, THE PLANE-OF-LIVING INDEX, THE PERCENTAGE OF FARM TENANCY, AND THE LAND VALUE PER CAPITA FARM POPULATION BETWEEN 21 COUNTIES HAVING MORE THAN 70 PERCENT MORMON POPULATION AND 17 COUNTIES HAVING LESS THAN 30 PERCENT MORMON POPULATION

Counties	Percent L.D.S. Population (1926)	Mean Number of Children under 5 per 1000 Females Aged 20-44 (1930)	Mean Plane-of-Living Index (1930)	Mean Percent Farm Tenancy (1930)	Mean Land Value Per Capita Farm Population (Dollars) (1930)
Above 70 Percent Mormon Population	86	971	153	11	1850
Below 30 Percent Mormon Population	14	764	112	24	1912
Difference	72	207	41	-13	-62

In correlating these variables, some unusual results were derived. (See Table 7, Column 7.) The correlation of farm tenancy with fertility shows a broad swing from $-.55$ in the zero order correlation to $+.65$ in the second order correlation where the factors of plane-of-living and the percentage of Mormon population are controlled. Normally, one would expect a positive correlation of farm tenancy with fertility. The reason that it is negative before the L. D. S. population and the plane-of-living is controlled is due to its high negative association ($-.82$) with the L. D. S. population. The decrease in farm tenancy as the percentage of Mormon residents in the counties increases is due, in part, to the very active encouragement which Mormon leaders have given to the practice of home ownership.

No other set of the various subdivisions of the sixty counties gives more convincing evidence of the relation of religious membership to fertility than the rural-farm ($r_{12.34}=.89$) and nonfarm population ($r_{12.3}=.91$) of the thirty-eight extreme counties. These counties have the highest and the lowest percentage of Mormon population, and the control over socioeconomic conditions affecting fertility is most complete.

The following observations can be made (see Table 7) which sum up rather conclusively the influence of the Mormon religion on determining population fertility.

1. Except for Utah, the proportion of Mormon residents in the counties correlates with fertility much higher than any other variable.
2. As the control over the variables affecting fertility becomes more complete, either by using partial correlation formulas or by a special selection of the counties, the correlation of fertility with the Mormon population is increased.
3. Another indication of the importance of religion in determining family

TABLE 7. GENERAL TABLE OF CORRELATION COEFFICIENTS BETWEEN FERTILITY RATIO (1) AND SELECTED CLASSES OF COUNTIES AND SELECTED INDICES

Symbols of Correlation Coefficients ¹	Classes of Counties							
	28 Utah	26 Idaho	27 Urban	60 Counties	33 Rural	38 Extreme Counties	38 Extreme Rural- farm	38 Extreme Rural Nonfarm
Percent L. D. S.								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
r_{12}	.23	.68	.58	.67	.74	.77	.76	.90
$r_{12.3}$	.57	.69	.63	.79	.88	.85	.88	.91
$r_{12.34}$	.58	.70	.71	.82	.86	.88	.89	—
Plane-of-Living Index								
r_{13}	-.63	-.12	.02	-.25	-.35	-.24	-.14	-.28
$r_{13.2}$	-.76	-.24	-.30	-.50	-.74	-.62	-.67	-.49
$r_{13.24}$	-.71	-.21	-.32	-.55	-.75	-.61	-.81	—
Percent Urban Population, Nonfarm, Farm Tenancy								
r_{14}	-.66	.02	-.79	-.21	.19	-.11	-.55	—
$r_{14.2}$	-.67	-.19	-.44	-.46	-.10	-.49	.19	—
$r_{14.23}$	-.59	-.14	-.48	-.36	-.22	-.40	.65	—

¹ See Table 1, Footnote 1 for legend of r -subscripts. In this table, however, "4" is used to represent four different variables. In regard to Utah, Idaho, the total 60 counties and the 38 extreme counties, "4" represents one half the percentage of nonfarm population added to the percentage of urban population of the counties. For the 27 urban counties, "4" represents only the percentage of urban population. For the 33 rural counties, it represents the percentage of nonfarm population, and for the rural-farm population, it represents farm tenancy.

size is evident by noting the fact that variables such as the plane-of-living index and the percentage of urban population which ordinarily correlate well with fertility are obscured in significance until the percentage of Mormon inhabitants in the counties is statistically controlled; also in reference to farm tenancy, this variable has an unusually marked negative association with fertility—an association which becomes positive only when the L. D. S. population is controlled.

4. As the differences in the proportion of Mormons become increasingly greater between counties, the fertility differentials become more pronounced. Taken separately, the counties of Utah and Idaho have the least variation in Mormon residents and the lowest correlation of the L. D. S. population with fertility. When the variability in the percent Mormon population is increased by combining the counties of these two states or by making a special selection of counties which have the highest and the lowest

number of Mormons, the correlation of fertility with L. D. S. membership becomes increasingly more significant.

While there is evidently a decided motivation in the Mormon faith to maintain the biological function of the family, this faith is not impervious to the usual socioeconomic conditions that favor a decrease in the size of the family. The birth rate in Utah is following the national trends. As cities in Utah increase in size, the birth rate falls consistently. With an increase in the plane-of-living, there is a corresponding decrease in the birth rate; this decrease is not very evident, however, in this Intermountain Region until the factor of religion is controlled. Since Utah entered the birth registration area in 1917, the figures show a steady decline in the birth rate. It reached its highest point in 1918 (33.1), and its lowest in 1933 (23.2).⁸

Many social innovations are occurring in Utah that point to a further decline in the birth rate. It is doubtful, however, that the birth rate of the Mormons will approximate a strict equality with the non-Mormons living in their midst. Mormon theology gives special stress to the importance of the family and the desirability of having children in the home. Persons who accept this faith will doubtless continue to make greater personal sacrifices to find a place for children in their homes than will parents who are not motivated by a similar religious idealism.

⁸ *Vital Statistics—Special Reports*, Vol. 7, No. 9, Page 27.

TYPES OF FAMILIES: AN ANALYSIS OF CENSUS DATA*

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BY CLASSIFYING families into types on the basis of characteristics of the family head, some valuable family data from the 1930 Census were tabulated, but only a small amount of these statistics were published in the form of rotprinted releases.¹ Plans for the report on 1940 family data include the publication of families by type. This paper presents an analysis of selected census data on family types, in order to illustrate the research opportunities that these materials afford.²

These statistics show families classified into three significant classes or types, according to the sex and marital status of the head of the family. (The head of the family is usually the chief earner, although in some cases his headship is more sociological than economic.) The three types are (1) "normal" families, that is, families with the head and his wife residing together, with or without other persons; (2) other families with a man as head of the family, including broken families with a widowed, divorced, or separated man as head, together with families having a single man as head; and (3) all families with a woman as head of the family. (For both (2) and (3), unpublished 1930 data are available by detailed marital status; for (1), (2), and (3), there are data for subclasses based on children under 21 years old.)

Size and Type of Family by Color-Nativity. In Table 1 and Figure 1 are shown the median size of family in 1930 for each type classified by color of

TABLE 1. MEDIAN SIZE OF FAMILY BY TYPE OF FAMILY AND COLOR-NATIVITY OF FAMILY HEAD, FOR THE UNITED STATES: 1930

Color-Nativity of Head	All Families	Normal Families ¹	Other Families with Man Head	Families with Woman Head
All families	3.40	3.72	1.66	2.22
Native white	3.35	3.64	1.77	2.12
Foreign-born white	3.74	4.09	1.49	2.54
Negro	3.15	3.56	1.37	2.33

¹ Families with the head and his wife present.

* A condensed version of a paper read to the Section on Research Problems of the Eastern Sociological Society, April 19, 1941, Providence, Rhode Island.

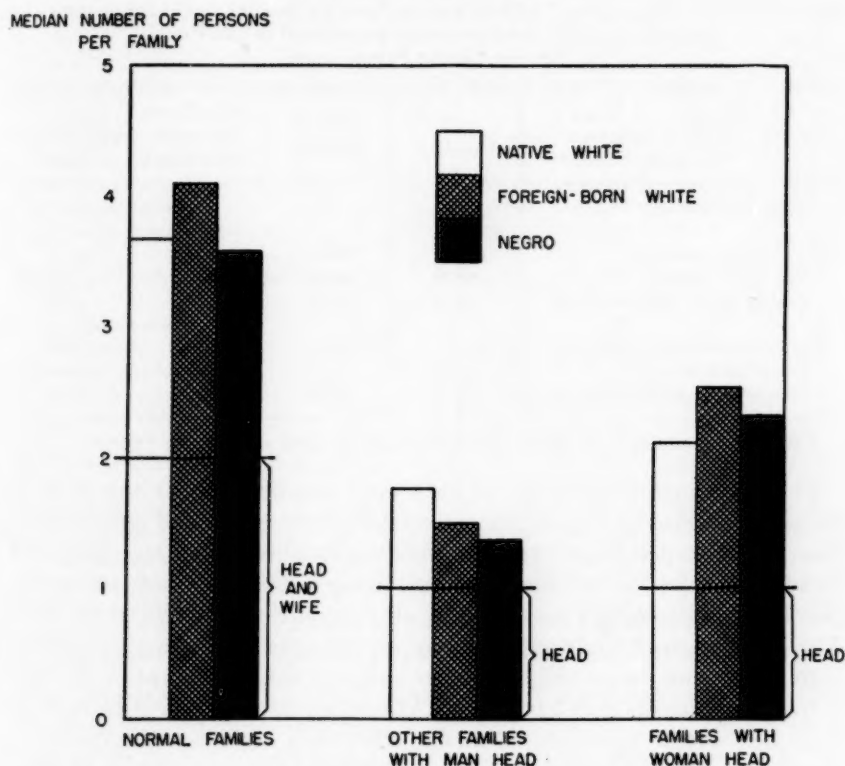
¹ "Types of families in the United States," released August 5, 1935; "Families in the United States by Type and Size: 1930," released May 17, 1940; "Types of Families in the United States by Number of Gainful Workers: 1930," released July 19, 1940.

² Several articles by Barkev S. Sanders in recent issues of the *Social Security Bulletin* present data on family types from the National Health Survey. Also, the series of bulletins on the recent *Study of Consumer Purchases* made by the Bureau of Labor Statistics and the Bureau of Home Economics show many of the results for families classified by type.

the family head, with the native white and foreign-born white families shown separately. Data for the so-called "other races," constituting less than two percent of all families, were not tabulated.

The results show that the three types of families differed more from one another than the color-nativity subclasses differed within each family type.

FIG. 1. MEDIAN SIZE OF FAMILY, BY TYPE OF FAMILY AND COLOR-NATIVITY: UNITED STATES, 1930.



A normal family must include at least two persons, namely, the head and his wife. Likewise, each of the other types of families must have at least a family head, who in one case is an adult man and in the other an adult woman. It is apparent that the median normal family contained 1.7 persons, mostly dependents, other than the head and his wife. In contrast, other families with a man head, on the average, included only 0.7 of one person besides the head, and families with a woman head contained 1.2 persons besides the head. Note also that foreign-born white normal families were clearly the largest. Contrary to many people's impressions, Negro families had a somewhat smaller median size than white families. In fact, in two of

the three types of families the Negroes reported the smallest families. These results for the Negroes are associated with color differentials in mortality and in completeness of census enumeration.

Adult Relatives in Family. Table 2 illustrates one kind of information that was derived by recombining certain data from the unpublished census material on families classified by type and size. The various family compositions shown in Table 2 have important economic and sociological differences.

TABLE 2. PERCENT DISTRIBUTION OF FAMILIES BY TYPE, BY NUMBER OF CHILDREN UNDER 21 YEARS OLD AND NUMBER OF ADULT RELATIVES¹ IN THE FAMILY, FOR THE UNITED STATES: 1930

Children under 21 Years Old and Adult Relatives in Family	All Families	Normal Families	Other Fam- ilies with Man Head	Families with Woman Head
Families having				
No children under 21	100.0	100.0	100.0	100.0
No adult relatives	67.6	73.4	62.7	52.2
One or more adult relatives	32.4	26.6	37.3	47.8
One or two children under 21	100.0	100.0	100.0	100.0
No adult relatives	71.0	74.7	39.6	49.0
One or more adult relatives	29.0	25.3	60.4	51.0

¹ Related persons 21 years old or over other than the head and his wife (if any).

In 1930, about three fourths of the normal families without any children under 21 likewise had no adults in the family except the head and his wife. Also, about 60 percent of the other childless families with a man head had no adult relatives (other than the head) living in the home and, among the childless families with a woman head, this proportion was almost one half. The distribution of adult relatives was approximately the same for families with one or two minor children as for childless families except in the case of the other families with a man head. More than 60 percent of these families contained one or more related adults other than the head. A typical example of this kind of home would be that of a widower and his small child, with the widower's mother staying in the home to take care of the child.

From the 1940 statistics, it will be possible to determine how many of these other relatives constitute "subfamilies," that is, married couples who are living with the head and others in the family. To the extent that the other relatives do constitute subfamilies, there is doubling-up of families. However, these adult relatives may be, and sample studies suggest that the majority are, unmarried children who have not yet left home.

Value or Rent of Home. The use of equivalent rentals to summarize in a single figure the economic level of both owned and rented homes is illustrated in Table 3 and Figure 2. Where owned homes are reported according

to the value of the home, a simple expedient is to assume that the value of an owned home is 100 times its equivalent rental. For example, the equivalent rental of a \$5000 home is assumed to be \$50 a month. More will be said about this assumption presently.

TABLE 3. MEDIAN VALUE OR RENTAL OF NONFARM HOMES OF NORMAL FAMILIES, BY NUMBER OF CHILDREN UNDER 21 YEARS OLD AND GEOGRAPHIC REGION, FOR THE UNITED STATES: 1930

Family Characteristics	United States	Geographic Region		
		North	West	South
Median equivalent rental of all nonfarm homes ¹	\$36.35	\$41.31	\$35.82	\$20.67
No children under 21	39.42	43.78	38.94	23.04
1 child under 21	37.43	42.10	36.38	22.61
2 children under 21	37.23	42.10	35.26	22.20
3 children under 21	33.60	39.30	31.12	19.10
4 or more children under 21	27.60	33.66	25.33	14.71
Median value of owned nonfarm homes	4,983	5,586	4,464	3,418
No children under 21	5,084	5,558	4,766	3,618
1 child under 21	5,228	5,847	4,612	3,712
2 children under 21	5,282	5,940	4,465	3,703
3 children under 21	4,884	5,581	4,056	3,246
4 or more children under 21	4,199	4,796	3,152	2,411
Median rental of rented nonfarm homes	27.94	32.50	29.06	15.35
No children under 21	31.18	36.11	32.70	16.83
1 child under 21	29.30	34.16	29.49	16.97
2 children under 21	28.25	32.82	27.93	16.24
3 children under 21	25.44	29.24	25.32	14.35
4 or more children under 21	21.17	25.38	21.35	12.36

¹ It is assumed that the value of an owned home is 100 times its equivalent rental.

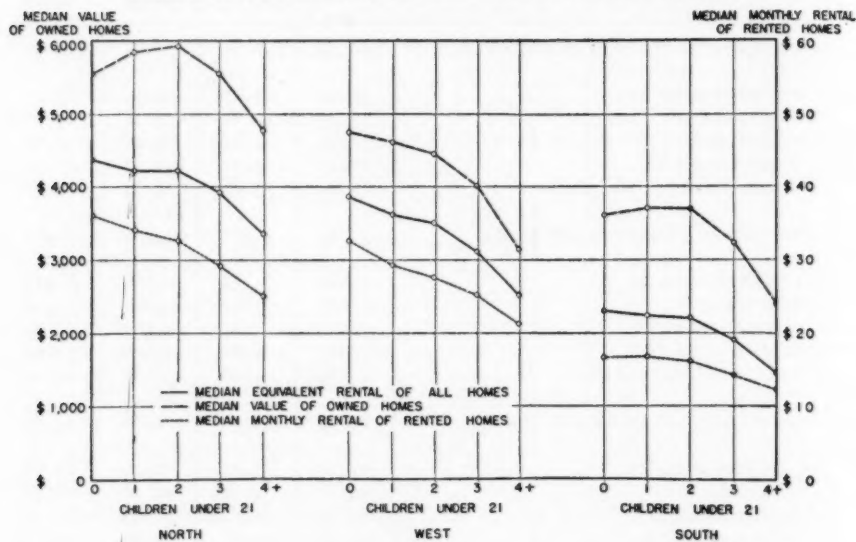
It is apparent that the cost of homes in the North stood highest, those in the West intermediate, and those in the South lowest. Also, the economic level of the homes in each region tended, with a few exceptions, to be lowered as the number of children under 21 in the family increased. The regional differences may be interpreted as reflections of discrepancies in the distribution of national wealth, in the degree of urbanization, in the distribution of the Negro population, and in the extent to which durable buildings are necessary for shelter purposes. The differences according to number of minor children support the economic differentials in human fertility.

In every region and for every number of children, the median value was considerably above 100 times the median rental. The excess was proportionally greatest in the South and proportionally least in the West. For all normal families in the South, the median value of owned homes was 223

times the median rental of rented homes; in the North the ratio was 172; and in the West it was 154.

These differing ratios may be interpreted as follows. In the South, the high ratio of 223 most probably means that Southern owners stood much higher than renters in the economic scale. Conversely, the relatively low ratio of 154 in the West probably indicates a smaller degree of economic difference between owners and renters in that region. Among Negro fami-

FIG. 2. MEDIAN VALUE OR RENTAL OF NORMAL NONFARM HOMES, BY REGION, AND BY NUMBER OF CHILDREN UNDER 21 YEARS OLD: UNITED STATES, 1930.



lies, the ratio was only 107. This may mean that Negro tenants in general paid higher rent than whites would have had to pay for the quarters the Negroes were occupying, or that tenure of home was not a differentiating economic index among Negro families.

Studies of small areas have revealed that the actual value of a home is usually somewhat more than 100 times the rental paid per month for that home. From the 1940 Census, however, estimated rent was obtained for each owned home and, therefore, in a few months more extensive equivalent rental statistics will be available.

Families with No Workers. In 1930, normal families constituted 79 percent of all families, whereas other families with a man head constituted 8 percent and families with a woman head nearly 13 percent of all families (see Table 4). Furthermore, families with no workers—the majority of which were potentially dependent families—were 6 percent of all families in 1930.

The extent to which the families with a woman head predominated among the families without a worker is clear. Although women headed only 13 per-

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TABLE 4. PERCENT DISTRIBUTION OF ALL FAMILIES BY TYPE, AND PERCENT DISTRIBUTION OF FAMILIES WITH NO WORKERS BY TYPE OF FAMILY AND NUMBER OF CHILDREN UNDER 21 YEARS OLD, FOR THE UNITED STATES: 1930

Children under 21 Years Old	All Families	Normal Families	Other Families with Man Head	Families with Woman Head
All families	100.0	79.2	8.1	12.7
All families with no workers	100.0	32.6	11.4	56.0
No children under 21	100.0	33.2	13.3	53.5
1 child under 21	100.0	32.9	4.9	62.2
2 children under 21	100.0	29.7	3.5	66.8
3 or more children under 21	100.0	27.5	2.7	69.8

cent of all families, they headed 56 percent of all families without a worker. As the number of children in the family increased, the proportion of the workerless families with a woman head mounted until it reached almost 70 percent for families with three or more children. These data show the extent to which a known social problem existed in 1930. The family statistics from the 1940 Census will present much more detail on family employment than were available from the 1930 Census.

Age of Family Head by Size of Place. The heads of normal families were about ten years younger, on the average, than the heads of the other two types of families, that is, about 43 years compared with 53 years of age (see Table 5). The age differential was larger in small nonfarm areas than it was in either the largest cities or the rural-farm areas. A selective tendency for elderly widowed persons to retire from farms or large cities to villages or small cities may be a reason for this differential. Also a selective migration of young or middle aged couples from farms to cities may account for the two or three years higher median age of normal family heads on farms than in nonfarm areas.

TABLE 5. MEDIAN AGE OF FAMILY HEAD, BY TYPE OF FAMILY AND SIZE OF PLACE, FOR THE UNITED STATES: 1930

Size of Place	All Families	Normal Families	Other Families with Man Head	Families with Woman Head
All families	44.4	42.6	52.0	53.5
Cities of 250,000 or over	43.1	41.6	47.2	50.9
Cities of 25,000 to 250,000	43.8	42.0	51.3	52.5
Cities of 2,500 to 25,000	44.9	42.7	54.1	55.0
Rural-nonfarm	44.8	42.1	54.8	57.5
Rural-farm	46.1	44.8	52.8	53.9

Childless Families by Age of Head. When normal families with no children under 21 years old are classified by the age of the head, some light can be

thrown on the extent of voluntary plus involuntary childlessness. Such a distribution has been derived by recombining unpublished figures for normal families and is shown in Table 6 and Figure 3. The distributions for the other two types of families are shown for purposes of comparison.

TABLE 6. PERCENT OF FAMILIES WITH NO CHILDREN UNDER 21 YEARS OLD, BY TYPE OF FAMILY AND AGE OF FAMILY HEAD, FOR THE UNITED STATES: 1930

Age of Head	All Families	Normal Families	Other Families with Man Head	Families with Woman Head
All ages	38.9	31.9	74.0	60.1
Under 25 years	45.8	44.9	58.1	41.9
25 to 29 years	34.0	30.5	79.7	50.2
30 to 34 years	25.1	21.4	79.4	40.5
35 to 39 years	21.8	17.5	73.8	35.9
40 to 44 years	22.6	17.6	67.7	37.9
45 to 49 years	28.6	22.8	66.1	44.5
50 to 54 years	38.6	32.4	67.2	53.8
55 to 59 years	50.6	44.3	71.7	64.5
60 to 64 years	63.9	57.8	76.7	76.7
65 to 69 years	74.6	69.6	81.4	83.3
70 to 74 years	81.4	78.2	84.3	86.5
75 years and over	86.3	83.5	86.8	90.0
Unknown	62.4	54.2	76.6	70.4

Note that the normal families had the smallest proportion of childless families within every age group of heads but one. As the heads of normal families advanced in age up to about 40 years, a decreasing proportion of their families still contained no children under 21. Most of the family heads passing 45 years of age without having children are not likely to have any of their own thereafter. For that reason, it is interesting to note that 17.6 percent of the normal family heads 40 to 44 years of age had no minor children in the home. The percentages of childless normal families increased sharply for heads above the age of 45 years, thus signifying the gradual aging of children until they passed 21 or until they departed from home.

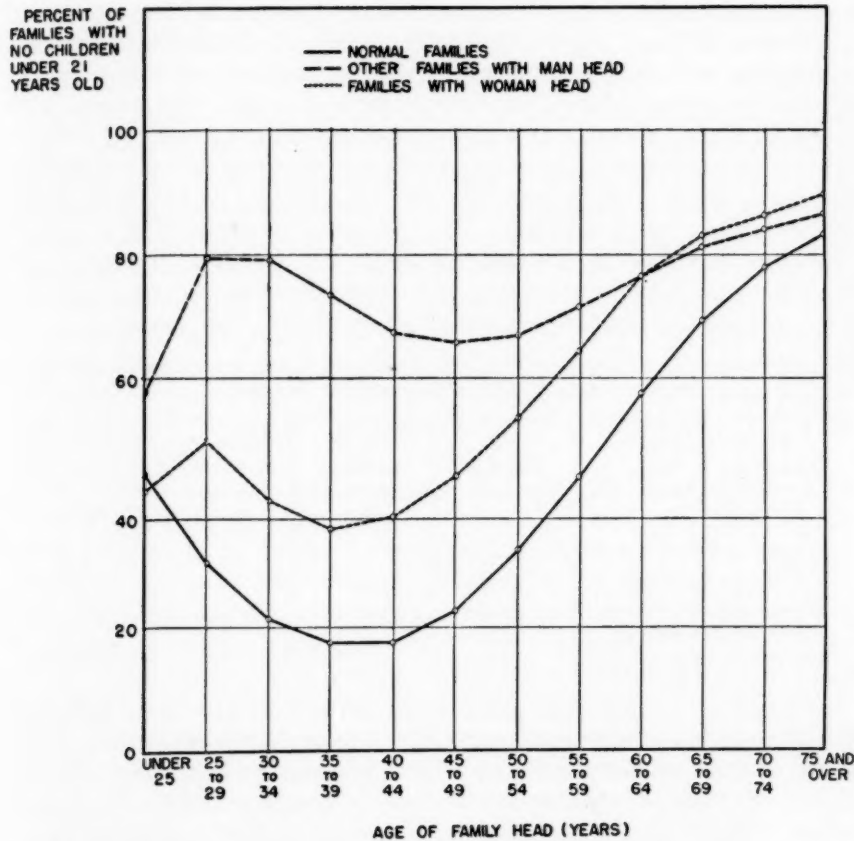
This is the best information that the Census Bureau has on childlessness in 1930, but the question on number of children ever born which was asked in the 1940 Census should yield still more refined data on this subject.

Age of Head and Number of Children under 21 Years Old. Another kind of derived data is presented in Table 7. Note the total figures for the median age of heads according to the number of children under 21. The interpretation of these figures is not immediately apparent. The heads were divided into two groups, those under 45 and those 45 and over, and median ages for each of these groups are shown. These figures may be readily interpreted. The medians for heads under 45 show that as the number of children increased the median age of the corresponding family heads increased. The

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FIG. 3. PERCENTAGE OF CHILDLESS FAMILIES, BY AGE OF HEAD AND TYPE OF FAMILY:
UNITED STATES, 1930.



medians for heads 45 and over should be read upward. They indicate how the median age of family heads continued to increase as the corresponding

TABLE 7. MEDIAN AGE OF HEADS OF NORMAL FAMILIES, BY NUMBER OF CHILDREN UNDER 21 YEARS OLD, FOR THE UNITED STATES: 1930

Children Under 21 Years Old	All Normal Families	Head Under 45 Years of Age	Head 45 Years of Age or Over
All normal families	42.6	35.0	54.9
No children under 21	50.2	32.1	60.0
1 child under 21	39.7	32.8	54.4
2 children under 21	39.4	35.0	52.4
3 children under 21	40.6	36.4	51.5
4 or more children under 21	42.8	38.4	50.3

number of children under 21 gradually diminished. This kind of analysis might be profitably adapted to many other distributions where controls must be introduced to clarify relationships not apparent in total figures.

Education of Head. The final table is based upon a tabulation of families enumerated in South Bend, Indiana, in the special census taken in 1939 for the purpose of testing new questions to be used in the 1940 Census (see Table 8). From this table, it may be concluded that the heads of normal families were somewhat better educated than the heads of other families. Relatively fewer of the former had had no schooling or less than eight grades and more of them had attended high school or college. This relationship seems to follow the fact that the heads of normal families were about ten years younger, on the average, and consequently were of school age at a more recent period when educational opportunities were greater.

TABLE 8. PERCENT DISTRIBUTION OF FAMILIES BY TYPE AND BY GRADE OF SCHOOL COMPLETED BY THE FAMILY HEAD, FOR SOUTH BEND, INDIANA: 1939

Grade of School Completed by Head	All Families	Normal Families	Other Families with Man Head	Families with Woman Head
All families	100.0	100.0	100.0	100.0
None	1.5	1.3	2.6	2.4
1 to 8 years grade school	53.8	52.0	63.2	60.6
1 to 4 years high school	31.4	33.0	22.2	26.1
1 or more years college	11.5	12.1	8.8	8.7
Unknown	1.8	1.6	3.3	2.3

Conclusion. In the foregoing discussion several examples of statistics on family types have been presented.³ Some of these were taken directly from tables of the kind that the Census Bureau prepares for publication. Statistics in this form are valuable and in many instances are fully adequate to answer the questions of administrators and students of family problems.

But some of the data also illustrate the kind of results that may be derived by recombining the material that is published by the Bureau. These latter data are presented in order to suggest some of the many opportunities that the Census publications offer to persons interested in family research. Although the Census Bureau has made plans for the preparation of several monographs on selected parts of the 1940 Census material, the Bureau is first of all a disseminator of raw statistical data. The extent to which the full implications of these materials are brought to the attention of persons in either academic or administrative fields depends largely upon the ingenuity of research workers in analyzing and interpreting the figures that the Census Bureau publishes.

³ For further details on family data that will be available from the 1940 Census, see Philip M. Hauser, "Research Possibilities in the 1940 Census," *Amer. Sociol. Rev.*, 6: 467-468, Aug. 1941; Henry S. Shryock, Jr., "General Population Statistics," *J. Amer. Statist. Assn.*, 36: 379-380, Sept. 1941.

METHODOLOGICAL PROBLEMS IN SOCIAL DISORGANIZATION*

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THE FIRST problem which confronts one in the study of social disorganization is that of finding a suitable frame of reference in terms of which to make the analysis. This involves both the definition of what constitutes social disorganization and the setting up of a conceptual scheme in terms of which all the several forms of social disorganization become explainable as variations upon a common theme.

In the attempt to define what constitutes social disorganization two divergent philosophical premises operate: one leads to the definition of social disorganization as a condition; the other to its definition as a process. The consequence is that the conception and definition of social disorganization differs radically in terms of the basic assumptions with regard to the nature of social reality.

As a condition, social disorganization has been analyzed in terms of social problems, social pathology, and social disease. The distinctive characteristic of this approach is that certain conditions are looked upon as inimical to social welfare and call for concerted action on the part of the group in order to eliminate these conditions. What constitutes a social problem is, therefore, a matter of judgment as to what constitutes social welfare. In turn, social welfare tends to be a subjective concept unless some device can be evolved for eliminating its evaluative character.

In general, the various attempts to eliminate the subjective character of the distinction between what is and is not a social problem may be differentiated into three approaches: (1) definition in terms of group consciousness, (2) the operational approach, and (3) the cultural lag hypothesis. Each of these approaches leads to greater objectivity than that obtained through the naive definition of a social problem as any condition which someone judges to be contrary to social welfare. None of the three, however, entirely eliminates the necessity of making subjective judgments.

The identification of a social problem in terms of group awareness that a social situation exists about which something ought to be done is obviously more objective in character than the isolated judgment of an individual, yet it is quite apparent that group awareness in most instances, if not in all, is generated out of individual awareness. This raises the question, accordingly, how are the essential conditions of social reality changed in the process of converting an individual judgment into a collective judgment? Furthermore, what proportion of the group has to come to accept the situation as a

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problem before it is a problem? Finally, how is one to know when group awareness is achieved? The answers to all these questions involve subjective judgments and do not, therefore, furnish a satisfactory solution to the problem.¹

The operational approach likewise does not eliminate subjective judgments for all its attempt to reduce the distinction between what is normal and what is not to a statistical statement. According to this point of view, activities of a particular kind may be thought of as constituting a continuum to be broken into commensurable parts, the frequency of occurrence at the several points along the continuum approximating the normal distribution curve. The range of two times the standard deviation would then define the normal, but only as activity fell below minus two times the standard deviation would it belong in the realm of a social problem.² Leaving out of account the technical questions of how each continuum is to be broken up into commensurable units, and whether or not the normality of distribution is justified, this procedure is subject to certain deficiencies. In the first place, there is no reason to believe that a statistically defined point in a continuum has any particular significance for the understanding of human behavior any more than it would have for the understanding of H₂O in the several forms of vapor, water, and ice. Secondly, if the basic assumption of normality of distribution holds, every group no matter how homogeneous would have its social problems and they would always be the same ones no matter what was done since there would always be variation some of which fell below minus two times the standard deviation. Furthermore, in one group the range might be several times that in another and this range might shift in length from time to time. The consequence would seem to be the acquiring of a spurious objectivity based upon an initial subjective judgment that only certain statistically defined parts of a continuum are socially significant.

The cultural lag hypothesis likewise is not free from subjective judgment as to what constitutes a social problem. The essence of this hypothesis is that material culture tends to change more readily and more rapidly than nonmaterial culture. The consequence is that those parts of nonmaterial culture most closely related to the material—i.e., the adaptive—are soon out of harmony with the material aspects of culture.³ This lack of harmony gives rise to stresses and strains which constitute the social problems of

¹ See Richard C. Fuller, "The Nature and Study of Social Problems," in Robert E. Park (ed.), *An Outline of the Principles of Sociology*, pp. 3-9, for a concise statement of the "collective awareness" point of view.

² See George A. Lundberg, *Foundations of Sociology*, 213-216, New York, 1939.

³ W. F. Ogburn has in Ogburn and Nimkoff, *Sociology*, 877-900, New York, 1940, restated his cultural lag hypothesis in more general terms so that it is equivalent to unequal changes in correlated variables and no longer necessitates the distinction between material and non-material culture.

society. While there should be no great difficulty in establishing objectively the fact of cultural lag in those instances in which for a particular period of time one aspect had remained constant whereas the other had changed, the number of these instances is likely to be very limited indeed. The consequence is that in the more numerous instances, whether or not a society is faced with a particular problem turns upon at least two judgments: the judgment as to whether the speed of change in one aspect has or has not been equivalent to that of the other, and whether there is any reason why one should change at the same rate as the other. Thus, the analyst has to judge, first, whether or not lack of harmony between two aspects of culture gives rise to stresses and strains (i.e., a social problem), and secondly, if in the present situation there is such an imbalance.

Social Disorganization as a Process. It is quite clear, then, that the several attempts to define social disorganization as a condition result in each instance in evaluative judgments as to what constitutes a social problem. The next task is to examine the various attempts to analyze social disorganization as a process in order to determine whether or not this approach offers greater objectivity than the various attempts to identify social problems with definitive categories of social conditions.

One of the earliest attempts to conceive of social disorganization as a process is that of Cooley in which social disorganization is but a stage in the larger process of institutional growth and decay. According to this notion, incipient institutional organization arises tentatively out of commonly felt needs. This tentative state passes into one of efficiency in which individual needs and institutional forms are complementary in character. Having become established, however, institutional forms tend to be perpetuated for their own sake and this marks the period of formalism in which there becomes increasingly less harmony between individual needs and institutional forms. This third stage is followed by disorganization, in which institutional forms lose their utility leaving the individual without guidance and discipline. Out of this disorganization, new attempts at adjustment are made and thus the cycle begins over again.⁴ Throughout this analysis, the answer to the question of whether or not and to what extent the institutional arrangements satisfy human needs is crucial. Cooley assumes throughout the beneficence of a pristine human nature generated in the primary groups. Institutional arrangements which give rise to the hampering and thwarting rather than facilitating the expression of this pristine human nature create social problems. Thus, the evaluative character of Cooley's analysis is quite apparent. Nevertheless, his analysis served to call attention to the need for considering the problem of social disorganization within the larger framework of social change.

Cooley's analysis of social disorganization has been largely superseded by

⁴ See Cooley, Angell and Carr, *Introductory Sociology*, 406-415, New York, 1933.

that of Thomas and Znaniecki whose process conception has received wide acceptance and reformulation at the hands of contemporary sociologists. According to this point of view, social disorganization represents a decline in the functioning of the controls exercised over individual behavior by the rules of the group.⁵ Thus, to the extent to which rival systems of norms come into conflict, or the individual comes to look no longer upon the norms of his society as imperative, social disorganization results. Accordingly, social disorganization varies all the way from the single break of a particular rule upon the part of one individual to a general decline in the operation of all the rules of a society. The consequence is that there is in every society some social disorganization the extent of which tends to be checked by the production of new social rules. The stability of a society is, therefore, a dynamic equilibrium in which as the old rules fail to command the allegiance of a society, new rules better adapted to the changed demands of the group are developed to take the place of the old. Not infrequently, however, this process of social reconstruction is impeded by blind attempts to reinforce the old rules, in which case social disorganization outruns social reconstruction and the dissolution of the group follows or is threatened.⁶ Failure to maintain this dynamic equilibrium in any society accounts for the cyclical character of social disorganization-reconstruction.

Fundamentally, the conception of social disorganization-reconstruction of Thomas and Znaniecki is at one with that of Cooley. Basic to both theories is the process conception and the notion of the cyclical relationship between the two processes, social disorganization and social reorganization. The period of formalism in the Cooley analysis is the period of attempts to reinforce the old rules in the Thomas and Znaniecki analysis. Cooley, however, looks to the beneficent, primary-group-generated human nature as the source of reorganization; whereas Thomas and Znaniecki find in the inventor or leader the crucial instrument for the creation of new social forms. The result is that the latter conception tends to be less subjective and evaluative in character.

When it comes to the relationship between social and individual disorganization, however, these two theories come into sharper conflict with each other. To Cooley, social disorganization without its corresponding individual disorganization is a contradiction in terms since the social and the individual are complementary aspects of the same thing. Thus, social disorganization is both cause and effect, the cause of individual disorganization as well as its consequence, but the same may be said of individual disorganization.⁷ Thomas and Znaniecki, on the other hand, assert that there is no clear and necessary connection between the two since efficient and pro-

⁵ W. I. Thomas and Florian Znaniecki, *The Polish Peasant*, II: 1128, New York, 1927.

⁶ *Ibid.*, II: 1127-1133, 1303-1306.

⁷ See Cooley, Angell and Carr, *Introductory Sociology*, 143-158.

gressive realization of the individual's fundamental wishes may exist in the face of rejection of the social rules, and inefficient life-organization may result out of conformity to a set of rules whose permanence and stability is a consequence of the narrowness of interests of the members of the group.⁸

In spite of these minor differences in the conception of social disorganization as developed by Cooley and by Thomas and Znaniecki, however, the basic pattern is the same. Both subscribe to the processual conception of social disorganization, and both set up as a criterion of the character of social organization the efficiency with which it facilitates the realization of individual satisfactions. The consequence is, therefore, that neither theory has escaped the pitfall of subjectivity. Furthermore, neither theory has consistently stated the relationship between social and personal disorganization. Cooley has attempted to formulate a complementary relationship from which he departs in his analysis in his assumption of the inherent integration of personality at the level of immediate human nature. Thomas and Znaniecki, while denying the one-to-one correspondence between social and personal disorganization, recognize that personal disorganization is largely the consequence of conflict between, and decline in appropriateness of, the social norms of the group.

While the Cooley and the Thomas and Znaniecki formulas have contributed to a more fundamental conception of social disorganization than the social condition approach, both have left much to be clarified with respect to the relationship of social disorganization to social change and to personal disorganization. Before attempting to clarify this relationship, however, it is essential to come to a clearer understanding of an essential epistemological problem which underlies the controversy between the process and social condition points of view.

The basic epistemological problem revolves around the question of what constitutes social reality. With regard to the character of social disorganization, the social condition conception approaches the position of social nominalism in its insistence upon operationally defined particulars as the essential social reality. In turn, the process point of view tends to approach social realism in its insistence upon the essential reality of the universal, the process, as the essential reality, the particulars being but imperfect expressions of the universal. What is needed is the recognition of the instrumental character of the process concept, whose methodological function is to provide a conceptual framework in terms of which the several forms of social disorganization become distinguishable, but at the same time are integrated into a conceptual whole from the standpoint of their social genesis.

Social Change, Variant Behavior, and Social Disorganization. Social organization refers to the coordination of individual responses as a conse-

⁸ See Thomas and Znaniecki, *The Polish Peasant*, II: 1128-1129.

quence of the operation of conventionalized and institutionalized patterns of consensus and control. Personal organization refers to the coordination and integration of the attitude-systems within the personality. Any change in the cultural context which impedes or destroys the functioning of these patterns of coordination represents social disorganization. In turn, any form of variant behavior which disturbs the integration of the attitude-systems within the personality represents personal disorganization.

Social change implies some disturbance in the context of the social order before the new element can be incorporated, just as some tension in the coordination of attitude systems in the individual precedes the development of new patterns. The consequence is that social change and disorganization, as well as personal disorganization, have their genesis in the variant behavior of individuals. In a society in which the personal organization of each member is the direct counterpart of the social organization, there can be neither social change nor social disorganization. But such a society never exists if for no other reasons than the appearance of hereditary variants, and the failure of the imitative process to produce exact counterparts to the culturally defined response. In complex societies, this tendency toward variation is further accentuated by the fact that no single individual ever incorporates within his personal organization all the elements of the social order. The consequence is that some selection of cultural elements takes place which in itself makes for variation.

Variations in personal organization thus appear inevitably and become the source of innovations in the cultural context. Some innovations receive ready acceptance because they can be incorporated into the social order with little modification of its essential pattern. Others meet with social disapproval and the individual is faced with three alternatives: revamping of the discordant elements so that their variance is no longer apparent; seeking out of others who have incipient trends in the same direction; or retreat into a subjective world.

Revamping of variant behavior in order to meet with social approval results in a form of social change which does not appreciably disturb the coordination of individual responses and is of the same order as that growing out of the readily acceptable innovations. Insofar as there is social and personal disorganization, these represent preparative stages for changes in social and personal organization. When, on the other hand, social change and individual variation take place in such a way as to throw the individual back upon his own resources and to a reinstatement of his elemental desires, then we have social and personal disorganization in a more extended sense.

To a large extent, the degree of social disorganization growing out of those aspects of variation which meet with social disapproval is a function of the form which social disapproval takes. If the innovator finds a sympathetic audience, he is encouraged to resist the constraining influence of

the larger group, and in doing so, he tends to accentuate his variant response rather than minimize it. Innovations which stir up only mild resistance tend to be supported by spontaneous, undisciplined associations and, if they represent some persistent trend, soon become incorporated into the social order; otherwise, they are shortly discarded. Where resistance is great, however, the tendency is to build up a highly integrated cult or sect whose mission is to force or convert the larger group to accept its innovations. This type of promotional organization tends to give rise to a counterpart in the organized resistance to social change and thus to lead to violent conflict between the sect or cult and the defenders of the social order. In this conflict situation, there tends to germinate the seeds of a more complete disintegration of the social order than could have been possible had the innovations been accepted, since it is characteristic of sects that they eventually encourage more sweeping innovations than those which they initially set out to accomplish.

However, all positive response to social disapproval does not result in attempts to define the variant response in terms of the social welfare of the group. Instead, the variant response may remain unchanged in its initial hedonistic form and insofar as there is any appeal for approval from a sympathetic audience it is upon the basis of common hedonistically defined attitudes. This is the realm of delinquency and crime in which the advantages of the variant response are defined exclusively in terms of the individualized desires of the innovator. It is also the realm of segmental behavior in which elemental appetites and passions exclusively dominate the personality, resulting in sexual license, perversions, crimes of passion, and the like.

If, in contrast, the innovator in the face of social disapproval, retreats into a subjectively defined world, his innovations lose their social character and become enmeshed in the development of mechanisms which further insulate him from the normal influences of group life. In the development of this subjective environment, he may utilize the mechanical aids of drugs and alcohol or the nonmechanical devices of phantasy and regression. The consequence is the development of types of personal disorganization which have no counterpart in social disorganization.

The virtue of the foregoing formulation is that it provides an integrated conceptual scheme to which may be related all the forms of both social and personal disorganization. In addition, it provides a basic framework, oriented in the notions of social change and variant response, in terms of which all forms of social and personal disorganization may be explained. Thus is provided a methodological tool with which to define the character of the data of concern to the researcher in the study of personal and social disorganization.

Indices of Social Disorganization. Corollary to the problem of formulating

a workable frame of reference is that of selecting an appropriate body of materials for study. In the past, this has generally been accomplished by accepting what was readily at hand in the form of legalistic and behavioristic definitions of what constitutes social and personal disorganization.

The legalistic definition of an index may be illustrated in terms of crime and divorce. Thus, an individual is a criminal when he has been arrested and convicted of behavior contrary to the moral precepts of the group expressed in the form of laws. A family has disintegrated when a divorce has been granted by a court. The inadequacy of such indices has been pointed out again and again and yet they continue to be used if for no other reason than the ready availability of such data. Nevertheless, there can be no doubt but that such indices always provide a biased selection from the larger whole exercised by the judicial process, without taking into account the incommensurability of the data when taken from more than one jurisdiction. The consequence is that the attributes of the delinquent and of the disintegrated family vary in terms of the ratio of contributing elements in the population. Thus, disintegrated families are seldom Catholics because the Church frowns upon divorce and good churchmen find other ways of resolving their domestic conflicts. Delinquents seldom belong to the upper class since this class is largely in control either directly or indirectly of the judicial process.⁹

While the difficulties inherent in the legalistic definition of what constitutes personal and social disorganization are commonly recognized, the inadequacy of behavioristic definitions is not. The consequence is that such indices are taken at their face value and no allowance is made for their inadequate character, whereas such allowances are ordinarily made for the legalistic indices. Researchers utilizing behaviorist definitions busy themselves, accordingly, with attempts to improve their sampling procedures, develop more elaborate mechanical aids to analysis, shift their emphasis from attribute to attribute, and in general revamp every aspect of their approach except to redefine the locus of study.

Thus, a delinquent is defined as a person whose behavior is contrary to the mores of the group without regard to the character of the act or acts from the larger standpoint of the personality. Acts growing out of organic defects in which the actor is unaware of the distinction in terms of which his behavior is judged are at one with acts in which there is a clear recognition of the moral character of the act by the actor himself. Acts unwittingly at variance with the mores because of entrance into a strange culture are at one with the most cunning attempts to circumvent social rules to one's own end. The explanation of why the color-blind automobile driver goes through a red light is the same as that which explains why he does not find

⁹ See E. H. Sutherland, "White-Collar Criminality," *Amer. Sociol. Rev.*, February, 1940, 1-12.

a painting largely in red tones attractive. The explanation of why a feeble-minded individual behaves contrary to the mores is the same as the explanation of why a blind person cannot distinguish between distant objects; namely, the consequence of a structural defect. The explanation of the stranger's failure to conform to the mores of the new social environment is the same as that of the child's appropriation of property which he has never been taught to regard as anything other than free goods; namely, some interruption or breakdown in the learning process.

This same difficulty may be illustrated with reference to the problem of insanity. Some forms of personality disintegration are clearly the consequence of tensions in the mental life of individuals which have found solution in behavior so at variance with the norms of the group that it becomes intolerable. Other forms of personality disintegration are clearly the consequence of structural defects whose origin lies in some biological process. If, however, no attempt is made to take into account this diversity of origin, the behavioristic picture may be essentially alike and so obscure the divergent character of the data. The difficulties involved may be further illustrated in the case of those psychoses in which syphilitic infection is the source of the psychosis.

There can be no doubt about the connection between syphilitic infection and paresis, although why some persons who are syphilitic do not develop this psychosis is not clear. Nevertheless, there is no reason to believe that paresis develops only under conditions of sexual license and not otherwise. If, then, sexual license is a segmental expression of personal disorganization (and the evidence seems to indicate that it is), it is only those cases of paresis which are the consequence of sexual license that can be taken as an index of personal disorganization and the rest will have to be excluded. The result is that the definition of the paresis in terms of symptoms is of little use in the analysis of sexual license as a form of personal disorganization.

The methodological problem, accordingly, consists in finding some way of delimiting one's observations so that genetically all cases are homogeneous. This implies classification based upon the differentiation of typical lines of genesis rather than upon legalistic and behavioristic patterns of overt response. In the study of delinquency, this means the elimination of all those forms of violation of the mores which do not involve self-conscious behavior. In the field of the psychoses, it is only with those forms of the disintegration of personality which have had their origin in mental conflict that are of concern to the sociologist.

Methods of Study. From what has been said, it follows that all the refinements of which human ingenuity is capable in the way of methods of study cannot overcome the inherent defects in the data with which one begins his analysis. Refinements in statistical analysis, accordingly, are likely to be productive chiefly as aids in the isolation of factors which eventually be-

come useful in the redefinition of the locus of the problem, but not in understanding its essential character. Thus, for example, the rate curves of juvenile paresis and of cerebral syphilis in Chicago during the depression period show clearly a cyclical movement which closely resembles suicide. This leads to the inference that this cyclical fluctuation from the trend line is in part the reflection of increased sexual license but this does not tell one whether the trend itself is in any respect the consequence of sexual license. What part of these data, accordingly, belong in the category of personal disorganization and what part do not is a matter for conjecture and all the statistical refinements in the methods of analysis will be of little assistance.

Neither is the ecological approach likely to overcome the inherent defects in the data. In fact, the use of this approach only further adds its own peculiar set of problems although it does provide a corrective for the heterogeneity introduced by variations in legislative definitions and administrative procedures since these are held constant in the comparison of one area with another within a larger, spatially defined, social pattern.

The first problem which the ecologist has to face is that of the appropriate denominator or base in terms of which to express his area rates. The customary procedure is to take the population as of a particular time for this purpose. When this is done, the results ordinarily show a fair conformity of area rates to the axial or concentric-circle pattern. That is, if the data are those ordinarily considered indicative of social disorganization, highest rates are found in the central areas and lowest on the periphery with a fair degree of uniformity in decline between these two extremes. Ross has pointed out, however, that insofar as mobility is greater in the central areas than in the peripheral, population data as of a particular moment do not constitute an appropriate base,¹⁰ and yet in the absence of data upon mobility there seems little hope of overcoming this defect. The consequence is, then, that one falls back upon a set of generalized assumptions about the character of ecological processes as justification for his assertion that variations in mobility rates cannot account entirely for the observed ecological patterning.

Suppose, however, that all rates were calculated in such a way as to hold mobility constant, would this make it possible to assert that the observed pattern was the consequence of the operation of community influences? The answer is that it would not in many instances. There seems to be little doubt but that the character of the various areas of a larger urban community is a consequence of the selective process by which different elements in the population are segregated. May it not be, then, that the areas of high social disorganization are such because they are recipients of cases of personal disorganization generated elsewhere?

¹⁰ Frank A. Ross, "Ecology and the Statistical Method," *Amer. J. Sociol.*, September 1933, 231-236.

But suppose one is able to hold constant this matter of drift from the less favorable community situation to a more favorable one, and it still turns out that some communities show higher rates of social disorganization than others. Since it is hardly plausible to assume that some communities will lack completely any cases of personal disorganization, the analyst will still have accomplished only a definition of where to look for cases of personal disorganization.

Statistical analyses, then, help to define the problem and suggest cues to the further study of personal disorganization. Such studies do not reveal the typical lines of genesis which are necessary to an understanding of why some persons become personally disorganized and others do not. What seems to be needed is the development of case-study approaches which will analyze upon a comparable basis the whole range of forms of personal disorganization from those in which variant behavior is of minor importance to those in which such behavior represents the dominant pattern of the personality. In this broadened approach, it will be necessary to recognize that the customary sources of contact are inadequate and that facilities will need to be provided through which more adequate contacts may be made.

COMMENT

RAYMOND F. SLETTO
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Professor Mowrer takes the position that what constitutes a social problem depends upon one's judgment as to what constitutes social welfare and that social welfare tends to be a subjective concept of an evaluative character. With this view there can be little disagreement except for the implication that there is wide variation of belief as to what constitute the goals to be sought by group endeavors. To me, it appears probable that there does exist far more consensus of values than this analysis implies. Thus, I believe that nearly everyone recognizes as desirable social objectives the reduction in the frequency of poverty, crime, accidents, diseases, mental illness, slums, and wars—to mention only a few of the values on which our people are agreed.

Where we disagree is on the measures to be taken to achieve these social values and on the ways in which the sacrifices necessary to accomplish these ends are to be distributed among the various groups in the population. When individuals obstruct rather than aid in the attainment of group values, it is less often because they reject the group values than because the methods proposed for their attainment conflict with the realization of private values to which these individuals are more deeply attached. Thus, there has been virtually no opposition to supplementing the incomes of the poor on the part of dealers in groceries and cotton goods through the new food and cotton stamp plans which permit these economic groups to make a fair profit. Had the government prepared to continue distribution of surplus goods through central commodity depots, it seems possible that these merchants who now actively support these undertakings in the direction of family supplements would have been allied in their opposition to these governmental subsidies. In short, proposals for the attainment of group values are likely to be resisted far less vigorously when they provide a profit for a vested interest than when they deprive a well or-

ganized vested interest of a profit. I repeat that our controversies are rarely over the desirable goals for group striving but are nearly always over the methods to be followed in attaining these goals and upon how the sacrifices needed to attain these values are to be borne among the various groups within the population.

In our efforts to be scientifically objective and in our revolt against what has been termed "arm-chair theorizing," many of us as sociologists have sought to exclude values from our theory of social disorganization or at least to reduce the prominence of values in that theory. In fact, values have themselves become a negative value to the research sociologist. In Professor Mowrer's paper, I sense this same effort to exclude or minimize values as somehow too subjective to warrant a prominent position in his theory. This effort in recent years to minimize the role of values in our theory appears to me to be a mistaken one. Instead of excluding values from our theory, it is my belief that values should be brought into a central position as the crux of our theory and should be given the objective study they have lacked. By all means let us be objective in determining the values to which people subscribe, in measuring the effects that these values have upon individual and group behavior, in the analysis and verification of our findings. Let us study objectively the modes of behavior utilized by individuals when the attainment of personal values conflicts with the realization of group values. Let us study objectively the factors involved in the development and abandonment of individual and group values and how the several values are organized into value systems. But in our search for objectivity, let us not rule values out of our theory of social and personal disorganization lest we find ourselves in the position of devising a theory of social and personal disorganization which defines the problem out of existence.

Professor Mowrer has presented a theory in which values and subjective judgments do play an important, if unrecognized, role. As one evidence of this, consider his statement relative to variant responses: "However, all positive response to social disapproval does not result in attempts to define the variant response in terms of *social welfare* of the group." Professor Mowrer's own judgment on social welfare is this, "Social welfare tends to be a subjective concept unless some device can be evolved for eliminating its evaluative character." To think of social welfare as other than evaluative in character seems to me to be impossible since the very term "welfare" implies a judgment as to what is well for society. What one considers *well* depends upon one's values.

Professor Mowrer declares that personal organization refers to the coordination and integration of the attitude-systems within the personality. Had he defined personality organization as the coordination and integration of the value system within the personality, I believe that his concept would have been a more fundamental and less vulnerable one. The attitudes which appear to be significant to the individual in terms of his personality organization are those linked to personal values. Other attitudes are little more than sets of opinions which have no special significance for the individual since the disruption of them is not likely to produce mental conflict. When an attitude has real significance to an individual, he is likely to defend it with some vigor. Whenever an individual champions his attitude vigorously, I think it is probable that he does so because the attitude impinges on a personal value. Unless Professor Mowrer does have in mind the coordination and integration of values or those attitudes closely linked to the value system of the individual, it appears that the study of personal organization and disorganization becomes essentially a study of the dynamics of mental organization and as such is primarily in the subject matter field of the psychologist rather than the sociologist. I think Professor Mowrer does recognize this since he states elsewhere in his paper, "In the field of the psychoses, it is only with those forms of the disintegration of personality which have had their origin in mental conflict that are of concern to the sociologist."

There are other aspects of Professor Mowrer's paper with which I am in disagreement but a discussion of them at this time would infringe on the time which should be utilized by other members of the round table. Professor Mowrer is to be commended for giving us a thoughtful theory. My criticisms of it are essentially amendments and modifications; they should not be interpreted as a failure to recognize that Professor Mowrer has provided an excellent basis on which to continue to build an integrated and satisfactory theory.

COMMENT

FLOYD N. HOUSE
University of Virginia

Professor Mowrer's paper may be divided into three main parts: first, a rather lengthy examination of existing conceptions of social disorganization, "social problems," and terms of related meaning, including disorganization of the personality. In this part of his paper, Mowrer suggests a few methodological, *i.e.*, *conceptual*, criteria for a sound and workable frame of reference for the description and study of the phenomena in question. I find this whole section provocative, but I am quite critical of his assumptions and postulates. Second, he presents, briefly of course, a frame of reference for the study of social and personal disorganization which he evidently believes to be an improvement on any in the existing literature. I have no important criticism of this section. The third and final section contains certain suggestions concerning *specific* procedures or methods of investigation, with some incidental criticism of devices of investigation and measurement used up to now. This section also I like on the whole.

I shall express briefly three principal comments on the first part of the paper.

1. Mowrer emphasizes the distinction between the conception of social disorganization as a *state* or *condition* and the conception of it as a *process*. Cannot the two be reconciled, in the general framework of Thomas and Znaniecki's treatment of the topic, by giving the term "social disorganization" reference *either* to a process, *i.e.*, "decrease of the influence of existing rules" . . . or to a condition, the result of the process or a snap-shot of it at a moment of time, *i.e.*, "the relative lack of influence of social rules upon the behavior of individual members of a group?" I believe personal disorganization can be similarly defined; however, I shall not try to deal with this more elusive question here, due primarily to space limits. I am tentatively of the opinion that, the human mind being the kind of instrument it is, static terms are much easier for us to use in our thinking and perhaps for that reason they may be used more effectively during the greater part of a process of reasoning or the presentation of its results. I do not believe there is any sufficient objection to one's slipping back and forth rather freely between the language of process and corresponding static terms.

2. Regarding the "subjective character" of our distinctions between social problems and what are not social problems, I think we ought to recognize that it is quite impossible to eliminate subjectivity altogether from our scientific procedures. Even Chapin's methods for measuring social participation, social status, condition of the furnishings of the living-room, and use-crowding involve an irreducible element of subjectivity, both in the judgments or observations of field investigators and in the standardization of the scales. The criteria of objectivity seem to me to be essentially two: (a) whether other investigators can confirm the findings of fact or the data; and (b) whether the interpretations made of the facts seem valid to most of those readers and critics who have considered them carefully. We touch here on a large, difficult, and persistent question on which we cannot expect to reach any thoroughgoing agreement in the brief time allotted to this round table. It seems

to me, however, that many of our difficulties and misunderstandings in this connection arise from our failure to distinguish clearly between epistemological and metaphysical questions, on the one hand, which perhaps ought not to detain us very long, and methodological questions of a rather fundamental sort, which are important in reference to scientific inquiry. The old problem of mind and matter which underlies much of the discussion and controversy about "objectivity," is, I think, of no direct importance to those whose primary concern is with methods of inquiry into human behavior. Objectivity *as verifiability* is, of course, important. I think Mowrer's own suggestions in the second part of the paper for conceptualizing social disorganization are on the whole methodologically sound and likely to be fruitful. If so, they meet the pragmatic test which alone, as I believe, concerns the scientist as such.

3. Regarding the adequacy of Thomas and Znaniecki's treatment of social disorganization. For a number of years, I have felt that Thomas and Znaniecki's treatment of social disorganization, when supplemented by a few interpretations which I believe to be consistent with their intentions, constitutes about as "objective" a conceptual standpoint from which to distinguish and study "social problems," "social pathology," and related matters, as can very well be achieved. It does not, in one sense, eliminate evaluation; this in my judgment cannot be done; the notions of pathology, disorganization, etc., are intrinsically evaluative in their implications. The version of the Thomas and Znaniecki concept that I shall attempt to state does, however, enable us to evaluate and compare social situations with full awareness of what we are doing and without begging any ultimate ethical questions.

We need only assume or postulate, quite arbitrarily if you like, that people need and generally desire a moderately secure, reliable environment in which to live and act. As far as their environment is constituted by other human beings, it can be reliable only if human behavior can be made predictable, if group members can count on it, in themselves and in their neighbors. But this requires, among other things, a fair degree of control of the behavior of individuals by group rules, usages, mores, etc. Decrease or relative lack of influence of such forces upon the behavior of group members makes it an unreliable environment for its members. Social disorganization so defined can, I think, be observed, compared in different groups or at different times in the same group, and, to some extent, measured.

Defining social disorganization in this way has the logical effect, of course, of placing it on a continuum, the other segment of which, or perhaps rather the whole of which, might be characterized in terms of "social control" as that expression is employed by some sociologists (though not by all, for the meanings attached to this term vary). "Social disorganization" would then refer to situations which could be located relatively near one end of that continuum—its lower segment, so to speak; while its upper segment would locate cases in which there was a relatively high degree of positive social control. While social situations are doubtless more difficult to measure by reference to this continuum than with reference to a continuum of mere frequency of occurrence, comparison of social situations with one another in these terms does not seem to me to be entirely impossible or unverifiable. Nor do such comparisons or the investigation of the processes involved necessarily imply any particular and ultimate ethical judgment concerning the inherent goodness or desirability of any segment of the continuum as contrasted with any other. We may freely concede that, as has often been remarked, *some* social disorganization is the price we have to pay for progress. Finally, I think this definition of social disorganization is quite compatible with Mowrer's constructive proposals set forth in what I have called the second main part of his paper.

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THE ELEMENT OF DECISION IN THE PATTERN OF WAR*

THEODORE ABEL

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DECISION is a neglected factor in the study of war. Its significance has been ignored by the student of war due, mainly, to two reasons. First, because of a prevailing tendency of viewing social events as we view physical phenomena. The result has been that researchers in the social sciences still look for simple formulas of functional dependence between overt responses and external, impersonal, or, as Sorokin calls them, trans-subjective occurrences. In the case of war, for example, sociologists are searching diligently for correlations of war with population pressure, the business cycle, mass psychosis, etc., and pay little heed to personal or 'subjective' factors like meaning, interest, intention, decision. The researcher, however, who analyzes war in conformity with Max Weber's postulate of understanding and who studies archives, autobiographies, and other personal records, soon discovers that 'subjective' factors are indispensable for the explanation of war. Secondly, the neglect of decision is due to the prevalent assumption that the cause-effect schema of the physical sciences is applicable to social phenomena. The structure of this schema is: "under specified conditions, A acting upon B will invariably produce C," e.g., barium chloride treated by sulphuric acid gives barium sulphite.

Social phenomena, as far as we know, never are immutable effects of some cause but are the outcome of a process of development in which innumerable and often unique factors play a role. It has been found, for instance, that criminality is not the effect of some general cause, or of a multiple combination of causes acting together. In studying crime, we therefore do not search for "causes" but analyze the processes by which individuals become criminals.¹

War, too, is a phenomenon of growth and development and not the inevitable and invariant effect of some 'cause,' or 'causes.' As long as we search for quantitative laws about war, the significance of the element of decision will escape us. If, instead of the vain search for causes, we turn to a study of the *pattern* according to which a war situation develops, the element of decision will be found to be an integral part of the war process. The elucidation of the pattern of war would require a sizeable volume. I shall confine myself to a few remarks about it in order to show the background from which decision emerges.

The initial phase of the war process is the appearance of a problem-experience in the sphere of interests of a group. The function of military action gives us a clue to the nature of the problem. We find that armed force is used

* Presented to the Eastern Sociological Society, April 19, 1941, Providence, R. I.

¹ C. L. Shaw (ed.), *Brothers in Crime*, Chicago, 1938.

in order to break down the resistance of an opponent and to dictate terms. The imposition of terms enables the aggressor to acquire new values, such as booty, indemnity, territory, slaves, natural resources, prestige and legitimacy, elimination of a rival, and so forth. The acquisition of new values which secure command over new sources of power can, therefore, be regarded as the basic intention of military action.

Since in human behavior the achievement of ends is being sought in order to solve a problem, we can infer the problem experienced by the initiators of military action from the nature of the intention. Throughout recorded human history, the initiators of war were individuals and groups who held power: political power, control over natural resources, means of production, land, markets, credits, and other sources of domination. In view of this, an action by a power group directed towards the acquisition of new values becomes meaningful if the problem experienced by it is a *threat to power*. The specific nature of the threat depends upon the kind of situation which confronts the group. Generally speaking, the events which are interpreted by a group as a threat to its power are precipitated by adverse changes in existing relationships, or changes in the relative position of groups² which make it increasingly difficult for the dominant group to maintain its power. A conflict situation arises when the resistance of another group creates an obstacle to the intention of eliminating the threat to power.

The war process then enters its second phase which is characterized by a give and take between two groups in which they are mutually objects of each other's actions. As this sociological process goes on without advancing the solution of the problem, the issue becomes focused with increasing sharpness and a crisis develops. The crisis grows with the narrowing down of the range of possible solutions. It reaches its climax when negotiations fail and intimidation proves ineffective. The power group then faces the alternative of either resigning from its position of dominance or employing violence as a radical means of solving its problem.

The experience of a crisis does not directly or necessarily precipitate war. However, it inaugurates the last phase of the war which opens with the decision by the leaders of the group whose power is threatened to use physical force as a means of resolving an anticipated or actual critical situation.

A sample study of the history of twenty-five major wars³ suggests the following conclusions about the nature of the decision.

² Pitirim A. Sorokin, *A Neglected Factor of War*, *Amer. Sociol. Rev.*, August 1938, page 483. See also his *Social and Cultural Dynamics*, vol. III.

³ The sample represents about one third of the total of known major wars. A major war may include a number of campaigns spread over a long period of time and flare up intermittently. In Sorokin's study of wars (*Social and Cultural Dynamics*, vol. III), campaigns are listed as separate wars which accounts for the discrepancy between the total from which my sample is drawn and the total of over one thousand wars enumerated by Sorokin. We may call a major war which, like the French-English war, lasted over five centuries and comprised over one hundred campaigns, an *International Feud* following Quincy Wright's suggestion in the *Amer. Sociol. Rev.*, August 1938, page 469.

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1. The decision to fight, unless the opponent abandons resistance without a struggle, is not reached on the spur of the moment. In every case, the decision is based upon a careful weighing of chances and of anticipating consequences. Many elements enter into the consideration of adequacy preceding the decision, such as relative military strength, available resources, ability to stir up community sentiment, reliability and extent of outside support, and so forth. The calculations are based upon information gathered by diplomatic representatives, spies, technological experts, military observers, and other like sources. In no case is the decision precipitated by emotional tensions, sentimentality, crowd behavior, or other irrational motivations.

2. The rational, calculating decision is reached far in advance of the actual outbreak of hostilities. Most students of war have failed to recognize this startling fact. The prevailing opinion on the origin of war is well stated by Willard Waller in *War in the 20th Century*. He writes:

We may say that in the last analysis wars result from movements of public opinion . . . We have wars because we develop war fever. The process of going to war may be thought of as a sort of spiral movement of public opinion which is largely beyond control. The war process is like certain phases of the economic system: no one wills it, and yet the totality of the process is the result of the interaction of many wills [pp. 17-18].

My sample study has convinced me that this thesis is incorrect. The evidence shows that the decision to wage war *precedes by one to five years the outbreak of hostilities*. War fever and the process which Waller compares to "the milling of a crowd getting ready to stampede" indeed take place and often are part of the war pattern, but they happen *after* a deliberate decision is reached. Often, the war fever and milling process are intentionally engineered by the power group to win the support of community sentiment.

I shall confine myself to brief citations of evidence on a few clear-cut cases to illustrate my thesis. It must be kept in mind that evidence on decisions to wage war are necessarily secret. Relevant documents are available only where government archives are made public and inspection of reports of cabinet meetings, communications of diplomats, confidential correspondence between heads of governments and government officials is possible. In the main, such material is only obtainable on past wars.

Here is an example with reference to the war of the European coalition against revolutionary France which began in the fall of 1792. On the basis of published documents from the Austrian archives of this period,⁴ we can trace the development which leads to the outbreak of hostilities practically from day to day. The power group which initiated the war were the beneficiaries of the feudal order. The crowned heads of Europe saw in the French Revolution a threat to the monarchical principle, while the owners of

⁴ Alfred Ritter von Vivenot, *Quellen zur Geschichte der Deutschen Kaiserpolitik Oesterreichs waehrend der Franzoesischen Revolutionskriege 1790-1801*, 2 volumes, Vienna, 1873.

estates (princes, dukes, counts, and bishops) felt that their ownership was threatened. There were ominous signs that the revolutionary idea was spreading beyond the boundaries of France. On February 19, 1791, the Austrian Minister, Kaunitz, wrote to Blumendorf, Minister of Prussia:

From several parts of the Empire warning reports are coming in to the effect that French emissaries are operating in the country stirring up the subjects against their rulers secretly and by various means. Considerable unrest is being created, particularly in the Austrian Netherlands.

The Austrian Emperor was urged by some of the princes to take drastic action: crush the revolution, reestablish the monarchy in France, and restore the land confiscated from the princes and the church dignitaries. Prince Kaunitz decided to heed these requests since he was advised that "right now there is promise of quick victory. The Alsatians are yearning for delivery and among French troops reign license and disorder." But Kaunitz calculated that a successful intervention requires the organization of a concert of powers, for Austria had been greatly weakened by the Turkish war, and her treasury was depleted. Thereupon the Austrian Emperor addressed a letter on July 6, 1791, to various crowned heads in Europe asking them to join him in a contemplated action against France. He wrote:

The excesses witnessed in France directly affect the honor of all sovereigns and the security of their governments. I therefore propose that the European powers join with me in council and jointly prepare measures that will regain the liberty of the French King and put an end to the revolution.

At the same time, Kaunitz addressed a letter to the Austrian ambassadors requesting them to prepare the way for a common intervention "designed to combat the hostile manifestations of the French National Assembly, the propagation of anarchy abroad, and the injustices toward legitimate princes." Kaunitz also instructed them to say that the Emperor was willing to contribute an army of 50,000 to the concert in addition to the troops already stationed in the Netherlands and in Westphalia.

A month later Kaunitz confidentially informed the Duke of Mainz that "the European powers now look with favor upon joined military action." The first step in organizing the coalition was taken on August 27, 1791, when the Austrian Emperor and the King of Prussia met at Pillnitz and secretly agreed to a joined resolution which ended with the statement, "In due course, the signators will give to their troops the necessary orders."

Short afterwards, Prince Kaunitz reported in strict confidence to the Duke of Mainz, that "the Imperial Council has decided on September 10 to order Austrian troops to march into France, as soon as the European coalition becomes effective." This conditional decision was made final on January 10, 1792, by the Council which approved active intervention in France during the coming summer. For weeks afterwards, there was an interchange of notes between the Austrian and French governments in which they

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⁵ B.

mutually accused each other of provoking war. Public sentiment was being aroused in Austria by announcements that France wanted to occupy Reich territory. The assertion was made that Austria and Prussia were merely "taking defensive measures in case of a French attack," but as Prince Kaunitz revealingly wrote in a secret message to the reigning Prince of Reuss, "It is obvious that this language will have no influence whatever in changing the main purpose agreed upon between Austria and Prussia of invading France with 100,000 troops." Ironically enough, war was declared by France, but the evidence clearly points out the instigators of the war, their motives and intentions, and shows that a calculating and deliberate decision to wage war was made a year before the outbreak of hostilities, and without 'war fever' and the 'milling process.'

I present this case as typical of the wars of the past I have studied. However, this evidence in support of my thesis can be disputed on the ground that it applies to wars fought by mercenary armies for the benefit of powerful individuals and cliques, with little or no participation of the community as a whole. Since the time of Napoleon, wars have become national wars fought by conscript armies and public opinion is now a major factor. This drastic change in the character of war might well have curtailed or even eliminated the element of decision of the Few and make my thesis inapplicable to modern wars. However, this is not the case, and in support of my contention I shall briefly cite three instances.

The first instance refers to the outbreak of the war between Austria and Serbia in 1914. From a study of the Austrian archives the conclusion is inescapable that the Austrian power group led by Count Berchtold, General Conrad, and Count Stuerckh had made up their minds to have war with Serbia several years before the outbreak of hostilities and were only awaiting a favorable opportunity. The opportunity came with the assassination of the Archduke Ferdinand which aroused widespread resentment and enabled the power group to win over public opinion in support of their decision. The evidence points to the fact that the decision was reached at the time of the annexation of Bosnia and Herzegovina in 1909. The annexation aroused the resentment of Serbia and Russia and created a crisis which threatened the very existence of the already shaky Austrian Empire. In consequence

in March 1909 . . . an ultimatum was decided upon, the date for its presentation was fixed, and an eminent historian was provided with materials by the Foreign Office for formulating the indictment against Serbia. All preparations were made for mobilization. If at the last moment war was averted, it was because Russia . . . withdrew her support and Serbia was left alone.⁵

Russia was caught unprepared but the Russian government secretly assured the Serbians of future support. The Austrian power group realized that

⁵ B. E. Schmitt, *The Coming of the War 1914*, vol. 1, 125, New York, 1930.

any further demands on Serbia would mean war and they decided to wage it. A vital factor in the consideration of the adequacy of such a move was the Alliance with Germany. The published correspondence between the Austrian and German governments clearly shows that the Germans knew of the decision of the Austrian power group and were willing to support it. It was for this reason that Count Berchtold declared at the time the Balkan war of 1912-13 broke out:

Naturally, the most acceptable solution of the Southern Slav question would be a small Serbia beaten by the enemy, which would be preferable to occupation of Serbia by the Monarchy. But if the first alternative fails [as it did], the Monarchy will be compelled to act in order to safeguard its possessions.⁶

The second clear-cut instance refers to the Ethiopian war waged by Italy in 1935-36. Our source is Marshall De Bono's extremely candid account of this campaign.⁷ In his preface to this book, Mussolini writes:

When Emilio De Bono disembarked at Massawa the preparations which had been made before his arrival were absolutely inadequate for their purpose, which was to settle once and for all the great account which had been left since 1896. The equipment of Eritrea in respect to harbors, roads, economic organization, and military strength had to be multiplied a hundredfold, and not by an indefinite date but within a brief space of time specified and established almost as a dogma: October 1935.

This "dogmatic" date-line was set by Mussolini two years before the outbreak of the war and months ahead of the engineered "incidents" of Ual-Ual and Harrar by means of which the sentiments of the Italian public were aroused. This fact is confirmed by De Bono's testimony. He writes:

... One day I said to the Duce, "Listen, if there is war down there and if you think me worthy of it and capable—you ought to grant me the honor of conducting the campaign." The Duce looked at me hard and at once replied, "Surely." "You don't think me too old?" I added. "No," he replied, "because we mustn't lose time." From this moment the Duce was definitely of the opinion that the matter would have to be settled no later than 1936 and he told me as much. ... It was the autumn of 1933. The Duce had spoken to no one of the coming operation in East Africa; only he and I knew what was going to happen, and no indiscretion occurred by which the news could reach the public [p. 13].

As further support, I quote from a letter written to De Bono by Mussolini six months before the outbreak of hostilities. In weighing the adequacy of the contemplated step and calculating his chances, Mussolini had to consider the possibility of interference by the League of Nations. He reports to De Bono on the result of his calculations as follows:

There has been talk of taking "steps" . . . I have made it understood that we shall not turn back at any price. . . . We shall get the better of the next Council of the League of Nations, but in September we shall have to begin all over again. . . . It may be that we shall find it necessary to withdraw from Geneva. It is precisely in view of this eventuality that it is absolutely indispensable not to alter the date—October, which we have fixed for the beginning of the eventual operations [p. 161].

⁶ *Die Grosse Politik der Europäischen Kabinette*, v. XXXV, 122, Berlin, 1922.

⁷ Emilio De Bono, *Anno XIII*, London, 1937.

The third and final instance has to do with the present war. As yet, no authoritative sources are available which would give us conclusive proof. However, an important clue to the effect that the decision to wage war was made by Hitler long in advance of the outbreak of hostilities and was based on careful calculations is given us by Rauschnigg. In the early spring of 1934 Hitler was instructing Rauschnigg, who then was head of the German delegation in Geneva, on his plans in Europe. The following fragment of the lengthy conversation is very illuminating. Hitler said:

"The material basis for independence grows with the increasing demands of technique and armaments. We cannot, like Bismarck, limit ourselves to national aims. We must rule Europe or fall apart as a nation. Now, do you understand why I cannot be limited either in the East or in the West?" "Do you seriously intend to fight the West?" Rauschnigg asked. Hitler retorted, "What else do you think we are arming for?", and he added, "We must proceed step by step so that no one will impede our advance. . . . That it will be done is guaranteed by Britain's lack of firmness and France's disunity."⁸

This conversation took place five years before the outbreak of hostilities. There was then no trace of war fever or of a milling process among the German people. On the contrary as late as May 1939, I found that most Germans were certain that Hitler would not "commit the folly of drawing us into world war" as one of my informants put it. The German people feared war and even atrocity stories failed to arouse public sentiment. The present tragedy clearly seems to be the result of a cold-blooded calculation by a group of usurpers uncertain of their power and incapable of taking the road of peaceful reconstruction.

In conclusion, I want to suggest that the discovery of the nature and role of decision in the war pattern has an important bearing on the problem of preventing war. Clearly, no efforts to prevent war can be successful unless they accomplish two things: first, create a situation wherein calculations of chances and consequences will produce negative results; secondly, develop means of checking the activities of power groups.

The first condition presupposes that the prevention of war is a common interest of nations and that, therefore, they will unite their forces against an aggressor. Hitler would not have launched his offensive if the failure of the League of Nations had not led him to expect that the nations of Europe would act like sheep in a slaughterhouse, patiently waiting for their turn to be expedited into oblivion. The second condition requires a much more thoroughgoing control by the community of the sources of power than anything we have at present.

Only far-reaching unification between nations and a drastic increase in community control within each nation can prevent what Spengler⁹ has called "the epoch of World Wars" from descending upon us.

⁸ Herman Rauschnigg, *Hitler Speaks*, 123, London, 1939.

⁹ O. Spengler, *Jahre der Entscheidung*, vol. 1, 16, Munich, 1933.

CONCEPTUAL INTEGRATION AND GOVERNMENT STATISTICS

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ON READING that the Committee on Conceptual Integration has held a meeting on the "Definition of Definition," an errant professor of sociology who has temporarily forsaken his college post to work for a governmental bureau is inclined to smile superiorly at the trivialities of academic discourse. But the sober second thought occurs, that a major process in the production of efficient statistics for governmental purposes is the formulation of definite and practical definitions. Perhaps after all government statisticians and social theorists could learn from each other in this respect.

Their problems have likenesses and differences. The social theorist requires concepts so rigidly and adequately defined that they can be subjected to algebraic operations without becoming distorted. The man engaged in collection of vast quantities of statistical data as a basis for planning or administering governmental activities seldom attempts such esoteric manipulations but he has other worries which do not beset the academician. He ought to purify his concepts as far as possible but he must above all keep them intelligible to a wider public which could not comprehend a Dodd-Lundbergian system of symbols.

In Washington,¹ it takes little imagination to conceive of a situation in which the manufacturers of tabulating machinery might be commissioned to put the production of social statistics on a completely automatic basis. Tabulating machines² would perform the brain work now laboriously carried on by human statisticians, and would automatically print the answers. Only a shortage of paper could then limit the quantity of statistics produced. When such a dream becomes a nightmare, you can even see reproducing punches turning out thousands of cards representing newborn citizens, each one duly prenumbered and with his name reduced to the Soundex code.³ Suddenly you realize that the name is unnecessary because the need for living citizens no longer exists. The punch cards can run through the machinery quite well by themselves.

Fortunately, Hollerith cards have not yet brought about such complete obsolescence of *Homo sapiens*. Men still tend to behave like human beings,

¹ Population (1940) 663,091, of whom some 2000 are senior professional workers in Federal statistical agencies and many times that number are junior professional and clerical workers.

² These should be equipped with summary-card punches to supplant the present army of statisticians, editors, typists, and printers who turn out official reports.

³ Those who are familiar with the art of mechanical tabulation will recognize that the latent content of this dream is not disguised by any fantastic creations of the dreamer's imagination. All of the machinery referred to is actually on the market.

although increasingly constrained to act and think as units in the cells of statistical tables. This applies not only to the ordinary social atom⁴ who has been Galluped and Ropered into opinion-groups, but even to the Olympian being⁵ whose powers of autohypnosis lift him to a vantage point of objectivity from which to look down with clear cool eyes upon his naive fellow men.

Available techniques for mass production of incredibly large and intricate masses of statistics have created a seemingly wide gap between the government statistician and the academic social scientist. But despite the apparent contrast between their *Weltanschauungen*, they have had and continue to have important mutual influences. Could the late Professor Hermann Hollerith have possibly foreseen the ultimate effects of his ingenious tinkering with Jacquard cards? Could he have prophesied not only the ever-swelling flood of government statistics but also the rise of ecological sociology, with its fatalistic dialectics and its superficial empiricisms? Could he have predicted that men would compute "delinquency rates" by census tracts (with or without probable errors or chi-squares) and then talk in the same breath about wishes and antisocial attitudes and disintegrated personalities? Or that they would cross nativity and parentage of the population by other statistical categories and then talk about xenophobia? Truly, Professor Hollerith may have much to answer for on Judgment Day.

But to cease persecuting the memory of a well-intentioned inventor and to return to living social theorists and government statisticians. The former, being (with exceptions) men of more than average good will, have too often naively accepted the latter's data at its face value. Statistics published in the chaste and solemn 8 pt. and 6 pt. of the Government Printing Office possess a persuasive quality to which even the most rigorous academic discipline does not produce complete immunity.

On the other hand, the "practical" men and women who direct governmental statistical agencies, even though many of them are renegade university instructors and professors, too frequently forget or have not time to recall and apply the abstract lessons they learned and taught in Statistics 1-2. Their attempts at conceptual purification have not been completely successful. General Francis A. Walker, Superintendent of the 1870 Census, thus prefaced his compilation of occupational statistics:

The Superintendent is ready to admit the theoretical inferiority of the somewhat "rough and ready" classification he has adopted to the scientific precision of the British system; but . . . he has never known the census statistics of occupations resorted to, either in congressional debates or in newspaper or magazine discussions for any purpose which would not be practically answered by the following tables.⁶

Many acres of field and forest have been laid waste since 1870 to provide paper for occupational statistics, yet the Joint Committee on Occupational

⁴ Man-on-the-street.

⁵ Sociologist.

⁶ Census of 1870, Vol. I: 661.

Classification which was established in 1939 still wrestles with such concepts as operative, laborer, craftsman, and tries to decide whether an army hospital orderly is engaged in medical service or military service. That is a part of the trouble. Some steps are being taken to correct it by standardization of categories. There are more and more committees on classification. Well-known examples of their work are the *International List of Causes of Death*, the *Dictionary of Occupational Titles*,⁷ the *Convertibility List of Occupations*, and the *Standard Industrial Classification*; other subjects are in process of codification.

But standard nomenclatures and standard classifications are not panaceas. Three difficulties remain: first, categories may overlap; second, the established categories may be irrelevant to the particular problem to be solved or the situation to be interpreted; and third, the available facts about a given case may not be sufficient to determine in what category that case belongs. These are serious matters because the categories used more or less predetermine the conclusions drawn, which in turn may affect governmental policies or academic theories or both.

Overlapping categories are well illustrated in the statistics of causes of death. During the epidemic of 1918, many women had influenza and died during pregnancy or childbirth. The New York City Health Department's mortality statistics for that year show only a slight increase of deaths due to puerperal causes, but the United States Census Bureau's tabulation of the same data for New York City shows a tremendous increase. This paradox, as vital statisticians know but as the consumers of their statistics often overlook, arose from the fact that when both influenza and a complication of pregnancy or labor occurred together, the City Health Department ascribed the death to the former, the Census Bureau to the latter.

A frequently irrelevant concept is unemployment. The most common criteria of this are ability and desire to work plus lack of a job. But the total number of unemployed persons so defined is not always a good measure of the available labor supply, for it excludes possibly millions of "unpaid workers" who are stranded on unproductive farms, "students" who are continuing to attend schools without doing any serious studying, and women who stay at home simply because no job near at hand has been offered them. A sociological study of the distribution and consequences of unemployment, for example, is incomplete and biased if it is confined to persons in the census category of "work-seekers."⁸

Again, in the study of marital relationships, sociologists have made much use of statistics based on the necessarily legalistic concept of marriage used

⁷ For an illustration of meticulously careful definition, see *walrus hunter*, *op. cit.*, Part III: 999.

⁸ This point has been well made by T. J. Woofter, Jr., in "Will Defense End Unemployment?", *Harper's Magazine*, May 1941, 625-630.

by the Census Bureau. Paragraph 465 of the 1940 *Instructions to Enumerators* says:

Write "S" for a single person (one who has never been married), "M" for a married person (this includes "separated" persons), "Wd" for a widow or widower, and "D" for a divorced person.

By these definitions, married persons separated without judicial sanction are still married while persons whose marriages have been annulled by a court (no insignificant number in certain States) are single. Yet for many sociological purposes both of these groups would logically be combined with the "Divorced," since they have all been detached from their former mates.

Perhaps the classic example of inadequate factual basis for classification of an individual case is encountered in analyzing occupational returns. Ask a man, or worse yet ask his wife, whether he is a skilled, semiskilled, or an unskilled worker. You may get a reply, but in a hopelessly large proportion of cases it will reflect a very human tendency to claim (perhaps unconsciously) the best possible status. Or inquire whether a man's job is permanent or temporary, whether he is a regular or a casual employee. Sometimes he will not know, sometimes his wish for security may dictate his answer. Yet for many purposes the answers to such questions have to be used for what they are worth—or for more than they are worth.

Despite all conceivable improvements of the concepts used in statistical compilations, there remains the further task of so phrasing inquiries that respondents who are not professional statisticians can give unambiguous replies. A single-page questionnaire recently drafted for a governmental inquiry used all of the following terms: family, family group, own family, own family group, related persons living together, household, and persons sharing quarters. Perhaps each of these terms connoted a slightly different entity; or perhaps they all meant the same thing. Certainly 20,000 respondents to the questionnaire could not all have been expected to construe them alike.⁹

Conclusions. An occasional period of government service can be a healthful experience for an academic sociologist, and *vice versa*. Possibly, as some colleagues tell us, it is only a sense of academic inferiority which prompts so many professors to seek government jobs in which they can ventilate their egos, but, conceding all sorts of subconscious motives, there is ample pragmatic justification for an interchange of experience which may temper both the professor's addiction to ethereal logomachies and the civil servant's unbridled pursuit of more and more indigestible statistics.

⁹ This schedule was rewritten before issuance.

A PRAGMATIC TEST OF THORNDIKE'S GG

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IN 1939, E. L. Thorndike published *Your City*. The thesis of the book was without precedent. It proposed a formula which would measure the "general goodness" of any city in as strictly quantitative terms as the I.Q. and similar psychometric tests measure an individual. A technical presentation of the formula was made in a memoir of the New York Academy of Sciences, entitled "American States and Cities." A review of this study in *The Annals* (Sept., 1939) described it in these words:

Professor Thorndike has compiled for his cities [the 310 American cities with populations in excess of 30,000] data on approximately 300 items, ranging in scope from population, per capita wealth, and public indebtedness to annual salary of full-time workers in chain stores, illiteracy rates, and per capita tobacco sales . . . He selects 37 traits which, in combination, he believes have significance as an index of "goodness" . . . The cities are then rated with respect to their "G" quality (goodness) with results that put Pasadena at the top and certain southern cities at the bottom. These variations established, the task is then, through correlation techniques, to determine the factors that influence the "G" score of the cities.

Your City is a popularized summary of these materials, written to be of practical use to municipal administrators and laymen. The expository chapters, couched in nontechnical language and containing explicit appeals to "common sense," are followed by a concluding chapter entitled "Improve Your City" in which Thorndike urges that his formula be adopted as the basis for municipal reform. Obviously, in this book his interest outruns the province of the scholar; he seeks action. With the practical purpose of the book so apparent, it is rather surprising that reviewers generally failed to judge it in the light of the practical question, would the idea work? The criticism covered almost all other conceivable questions. There was a plaintive editorial in *Municipal Management* saying Thorndike did not pay enough attention to the importance of municipal managers. A disillusioned liberal accused him of giving a glorified Fireside Chat. More scholarly reviewers criticized his presuppositions and methods: the attempt to reduce "goodness" to a quantitative concept; the handling of statistics, etc., but the primary question remained unanswered, could this pragmatic thesis meet a pragmatic test?

A pragmatic test would simply require that the "general-goodness yardstick" be applied to some city (or better, to many cities) not included in the original survey. This would determine whether: (a) the Thorndike indices are an accurate measure of actual conditions; (b) the items scoring lowest on the yardstick are actually the community's biggest problems.

Such a test was made in the summer of 1940 in Monroe, Michigan, an industrial city of approximately 18,500 population located approximately

thirty-five miles south of Detroit on Lake Erie. The tester was a local newspaper reporter who had lived in the city all his life and was familiar with local conditions. His newspaper had previously been influential in several major community reforms. He collected the data required by the Thorndike formula and presented the conclusions in a series of articles. The formula he used was not the 37-item index of general goodness applicable to large cities but a simplified 10-item index which Thorndike had prepared for use in small cities where data were likely to be scarce. The 10-item index, Thorndike claimed in a personal letter to this reporter, would yield a statistical result which approximated the 37-item index to "within 5 to 10 percent."

The ten indices and Monroe's data for each one were as follows.

1. Infant death rate, 53 per 1000. (Five-year average covering the period 1935-39 inclusive; source, State Department of Health).

2. Per capita expenditures for public recreation, \$0.40. (Period from July 1, 1939, to June 30, 1940; source, city director).

3. Per capita value of city-owned educational and recreational facilities, \$110.07. (As of June 30, 1940; source, city assessor).

4. Per capita difference between city's bonded indebtedness and estimated valuation of all city property excluding streets and sewers, \$157.51. (The city assessor estimated the value of all municipal real property as directed by Thorndike, and subtracted from this the amount of the city's bonded indebtedness. The remainder was divided by the population of the city. As of June 30, 1940).

5. Per capita current operating expense of public schools, excluding capital investment and debt service, \$17.45. (Period from July 1, 1939, to June 30, 1940; source, annual report of Board of Education).

6. Per capita senior high school graduates, 0.01. (As of June, 1940; source, principal of high school).

7. Per capita library circulation, 7.69. (Period from July 1, 1939, to June 30, 1940; source, annual report of librarian).

8. Percentage of all 16 and 17-year-old children in city who are attending school, 84.3. (as of May, 1940; source, annual school census).

9. Per capita telephone installations, 0.21. (As of July 1, 1940; source, local telephone company).

10. Per capita installations of electricity in homes, 0.28. (As of July 31, 1940; source, local electric company).

From these data, Monroe's GG (general goodness) score was computed, using Thorndike's special system of weighting. The score was 764, which ranked the city in the 650-800 bracket designated as "superior." This is the mathematical quintessence of the matter but it is too general to be of practical use. A municipal administrator seeking to follow Thorndike's advice, "Improve Your City," would have to consider the separate items to determine in which specific respects his city needed improvement. This

determination can be made, according to the Thorndike formula, by comparing Monroe, item for item, with the ten United States cities ranking highest in GG. *Your City* contains tables giving the average of the ten high cities and also of the ten low cities for most of the items. Each Monroe item can be expressed as a certain percentage of the distance from the low-city score to the high-city score. If this percentage is 100 or above for any item, that aspect of the city would be considered to need no improvement. A score slightly below 100—down as far as, say, 80—would indicate mild need for improvement. Items scoring considerably below 100 would be the real targets for reform action.¹ Monroe's percent position between the high and low cities is shown in Table 1. The item numbers refer to the list above.

TABLE 1. COMPARISON OF MONROE, MICHIGAN, WITH THE TEN HIGHEST AND LOWEST CITIES ON THORNDIKE'S GG SCALE, 1940

Items	Monroe (y)	Ten High Cities (x)	Ten Low Cities (z)	Monroe's Percent Position ¹ (ϕ)
1. Infant deaths	53	50	93	93
2. Recreation ²	\$0.40	\$1.84	\$0.63	<0
3. Educ. & recreation	\$110.00	\$116.00	\$57.00	90
4. Property ³	\$157.00	\$154.00	\$21.00	>100
5. School	\$17.45	\$21.50	\$10.00	65
6. H.S. graduates	0.01	—	—	—
7. Library circulation	7.69	—	—	—
8. 16-17-year-olds in school	84%	82%	51%	>100
9. Telephones	.21	.18	.10	>100
10. Electricity	.28	.29	.17	92

¹ By the formula $(y-z)/(x-z)=\phi$ (Monroe's percent position); figures are given to the nearest whole number.

² All items are per capita except 1 and 8.

³ Less bonded debt.

It will be noted that Items 6 and 7 are incomplete. These two indices of the 10-item yardstick do not appear in the 37-item yardstick, evidently being substitutes for items more difficult to secure, and *Your City* contains no data on them. Thorndike, in a reply to a request for these data, scribbled hastily, "These are available only in my files," and kept his secret to himself. Hence, only eight items can be used to show Monroe's percent position compared to the ten high and ten low cities: above 100 percent, Items 4, 8, 9; from 80 to 100, Items 1, 3, 10; below 80, Items 2, 5.

If the Thorndike analysis is correct, Monroe is blessed with extraordinarily prudent financial management, with unusually high living standards, and with a remarkably well educated generation of adolescents; it is among the healthiest of the nation's cities and has adequate educational and

¹ This statistical device is not proposed by Thorndike but by the writer.

recreational facilities; but it is failing to utilize to the optimum extent these educational and recreational facilities because its recreation budget, school budget, and library circulation are below par. This is the basis on which Thorndike would institute a program of municipal reform.

Recall the two questions of the pragmatic test being applied here: (a) is each of these indices an accurate measure of the general condition to which it refers? (b) are these reforms the only, or even the most urgent, problems of the city? To one who knows Monroe, six of the yardstick scores are amazing.

Item 1, high score in health. For years the health situation in Monroe and Monroe county has been openly and vehemently condemned by state health department officials as the "worst in the state." Not until 1935, after a typhoid epidemic swept the city, was there an adequate food inspection ordinance and a full-time inspector. The county board of supervisors, jealous of its local power, has repeatedly refused to sanction the organization of a state-approved health department, though this reform has the public support of the county medical society and has been adopted by most other counties in the state. The administration of public health two years ago was described at a public meeting as "rotten" by a prominent local physician who is a member of the American College of Surgeons. The late Mayor Karch, himself a physician, manager of a large hospital, and widely acquainted among all classes, was voted into the mayorship in 1937 on a platform one of whose major planks was health reform. The Children's Fund of Michigan, a charity organization which dispenses free dental work in the schools, withdrew its services last year saying it was folly to pour more money into a county which refused to help itself.

Item 2, low score in recreation expenditures. The yardstick credits only expenditures by the city recreation department. Actually, Monroe's expenditure for recreation in 1939-40 was more than three times the recreation department expenditure. The Board of Education and the Works Projects Administration together contributed about \$13,700, which, added to the city's contribution of \$7400, made the actual per capita expenditure \$1.14. On this basis, Monroe's percent position would be improved about 50 percent. This might still indicate drastic need for reform if there were not another factor to consider. Monroe, located only a mile from Lake Erie, is endowed by nature with free recreation facilities. Many of its residents own or rent cottages and indulge in both winter and summer sports. Those who cannot afford cottages have access to a state park nearby on the lake. Free facilities lessen the need for public expenditures.

Item 3, high score on educational and recreational facilities. The yardstick credits only public facilities. An estimated \$1,500,000 is invested in parochial schools which educate nearly one third of the city's children. If this figure were added to Item 3 and judged by Thorndike's criteria, Monroe's schools and playgrounds would appear appropriate to some dream community of sweetness and light. This is far from the case. Even if the

yardstick credited all available educational facilities, its score would be inordinately optimistic. The schools, both parochial and public, are badly overcrowded. One of the Catholic parish schools, unable to accommodate all of its parishioners' pupils, conducts Bible classes in a neighboring public school. The latter has had three additions in 15 years, tripling its capacity, and still remains crowded. The junior-senior high school, built in 1927 for an optimum enrollment of 1000 and a maximum of 1200, now has more than 1600 students; and the Board of Education is under pressure to build a new junior high school in a part of the city which, including two of the largest precincts, is served by only one grade school.

Item 5, low score on operating school expense. The yardstick credits only expenditures by the public schools, but, as mentioned above, far more is spent for schools in Monroe than is spent by the Board of Education, because one third of the city's school children are in parochial schools.

Items 9 and 10, high score on living standards. Of all the cities of comparable size in southern Michigan, Monroe has the largest slum district. This is due to several factors: the rapid growth of local paper, steel, automotive parts, and other industries since 1900; the large proportion of foreign-born residents from southern Europe; the location of the city between two metropolises, Detroit and Toledo, making it a favorite dumping ground for undesirable elements fleeing from the law. The late Mayor Karch, who because of his medical practice had a very wide personal acquaintance among the lower classes, declared housing conditions in this area deplorable and had taken the first steps toward reform just before his death in 1939.

Here is a fairly conclusive answer to the first question of the pragmatic test. Six of the ten indices do not reflect conditions accurately; two, lacking data for comparison, reflect nothing; two seem reliable.

As to the second question, inaccurate indices certainly cannot determine what are a city's most urgent problems, but there is a further consideration—a problem of considerable magnitude is ignored completely by the Thorndike yardstick. This is juvenile delinquency, fostered in the city's large slum areas. Delinquency is so widespread that University of Michigan sociologists use Monroe as a research laboratory. It is so frankly acknowledged that parents themselves in the largest of the underprivileged areas have recently organized a community improvement association, one of whose aims is the eradication of criminal environmental influences. It is so pervasive in its effects on the community at large that a few years ago the Monroe Community Council was organized. This is a volunteer city-wide organization of adults interested in co-ordinating and encouraging the work of all community agencies dealing with delinquency problems. Is delinquency a real problem or not in Monroe? This is another Thorndike secret.

The only conclusion is that, in this case at least, the 10-item yardstick flunked the pragmatic test. As a measuring device, it proved inaccurate; as a basis for reform, inadequate.

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THE SOCIAL FUNCTION OF ANXIETY IN A PRIMITIVE SOCIETY

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IN HIS discussion of anxiety, Freud emphasizes the fact that it is essentially an affective reaction to danger.¹ The relationship of anxiety to danger is anticipatory, the affect is a signal: "one feels anxiety lest something occur."² Anxiety is not confined to the human species. Freud states that it "is a reaction characteristic of probably all organisms, certainly of all of the higher ones."³ He further suggests that since it has an indispensable biological function, anxiety may have developed differently in different organisms.⁴ Freud does not elaborate the point, but I think it follows from the biological role he assigns to anxiety that it must be conceived as a function of the particular danger situations that the organism faces. These vary from species to species. What is dangerous for one species of animal would not necessarily be equivalent for another species, and danger situations in the human species may differ again from those faced by infrahuman animals. For the human species itself, Freud stresses another variable. Danger situations vary ontogenetically⁵ and the birth process is the "prototype of anxiety in man."⁶

What Freud does not explicitly recognize is that the occurrence of anxiety in the human species is further complicated by another variable that I shall call "cultural." However, his assumption that anxiety reactions in man are based on experience and are in that sense learned,⁷ leaves the door open for an evaluation of such variables within the framework of psychoanalytic principles. These cultural variables operate through the socialization process that all human beings undergo and result in the definition of situations as dangerous in one society which, in another, may be viewed as less dangerous or not dangerous at all. This means that individuals may manifest anxiety reactions that are appropriate in a particular culture but not in another.

Such cultural variables are of importance with respect to two problems:

¹ S. Freud, *The Problem of Anxiety*, 94, 121, tr. H. A. Bunker, New York, 1936.

² *Op. cit.*, 147.

³ *Op. cit.*, 93.

⁴ *Op. cit.*, 94.

⁵ *Op. cit.*, 116. Cf. page 108, "Psychic helplessness is the danger which is consonant with the period of immaturity of the ego, as object loss is the danger appertaining to the state of dependence of early childhood, the danger of castration to the phallic phase, and dread of the superego to the latency period. And yet all these danger situations and anxiety determinants may persist alongside one another and cause the ego to react with anxiety at a later period also than the appropriate one; or several of them may become operative simultaneously."

⁶ *Op. cit.*, 94. But Freud rejects O. Rank's theory "that those persons become neurotic who on account of the severity of the birth trauma have never succeeded in abreacting it completely" (page 123).

⁷ Cf. O. H. Mowrer, "A Stimulus-Response Analysis of Anxiety and Its Role as a Reinforcing Agent," *Psychol. Rev.*, 1939, 46: 554, note.

first, the basic question in which Freud himself was particularly interested, viz., the relation between anxiety and neurosis; secondly, the *positive* role of anxiety. This social function of anxiety is definitely linked, in principle, with the biological role which Freud stresses as a generic function of anxiety. I mean that an affective reaction to danger situations, as culturally defined, may motivate behavior on the part of individuals which is as significant in terms of societal values as comparable reactions are valuable in terms of biological utility. Anxiety-preparedness in the face of any danger is a very adaptive reaction.⁸

Before discussing this second problem, however, I wish to return to the first one, the relation between anxiety and neurosis. In this connection, Freud asks, "why it is that not all anxiety reactions are neurotic, why we recognize so many of them as normal," and he emphasizes the need for distinguishing between true anxiety (*Realangst*) and neurotic anxiety.⁹ The conclusion to which he comes is this:

A *real* danger is a danger which we know, a true anxiety the anxiety in regard to such a known danger. Neurotic anxiety is anxiety in regard to a danger which we do not know. The neurotic danger must first be sought, therefore: Analysis has taught us that it is an instinctual danger.¹⁰ [That is, fear of the intensity of one's own impulses].

This differentiation led to the terminological distinction often made between fear, *i.e.*, real or objective anxiety, and neurotic anxiety. I shall continue to use anxiety in its widest connotation, qualifying it with the adjectives "neurotic" or "objective" according to the meaning intended. In fact, I think there is a considerable conceptual advantage in considering fear-anxiety reactions as a broad affective continuum and not attempting to make categorical distinctions except in terms of known etiological factors, since what may seem to be instances of "pure" objective anxiety actually may have neurotic involvements when all the facts are known. On the other hand, as will appear later, there may be analogies to neurotic involvements in anxiety-laden situations which, in a particular culture, may present real objective dangers to the individual concerned.

Let us turn now to the second problem, the positive role of anxiety. I wish to show how anxiety is instigated and reduced in an American Indian society through the operation of cultural factors (beliefs and institutionalized procedures) which define certain situations as dangerous, how the motivations of individuals are affected, and how the resulting behavior is related to the maintenance of the approved social code.

⁸ Cf. Mowrer, *op. cit.*, 563. "Anxiety is thus basically anticipatory in nature and has great biological utility in that it adaptively motivates living organisms to deal with (prepare for or flee from) traumatic events in advance of their actual occurrence, thereby diminishing their harmful effects." According to Mowrer, anxiety may be viewed as "the conditioned form of the pain reaction" (page 555).

⁹ Freud, *op. cit.*, 147.

¹⁰ Freud, *op. cit.*, 147. In this paper, reference is made throughout to Freud's revised theory of anxiety. A discussion of the difference between his first and second theories will be found in chap. 4, *New Introductory Lectures on Psycho-Analysis*, New York, 1933.

The Indians to whose social system I have reference live in the bush country to the east of Lake Winnipeg (Manitoba, Canada).¹¹ Locally, they are known as Saulteaux and linguistically and culturally they are a branch of the Ojibwa. There are few white people in this area and the Indian population is sparse. The natives make their living principally by hunting, trapping, and fishing. Although the operation of acculturation processes makes it impossible to characterize their culture as "purely" aboriginal, not all of these Indians are Christians and in many other respects their manner of life approximates aboriginal conditions. The beliefs relevant to our discussion still flourish today and the more recent changes in their social system have not essentially affected the functioning of these beliefs.

One of the striking features of Saulteaux society is the anxiety with which certain disease situations are invested.¹² In order to understand *why* such situations are the focus of so much affect, we have to know something about native theories of disease. These theories reflect traditional notions. They represent an ideology which is culturally derived and they involve fundamental assumptions about the nature of the universe. From the standpoint of the Saulteaux themselves, such assumptions are taken a priori and are unchallengeable. They not only represent beliefs but are also a basis for action. The affect which arises in certain disease situations is a product of reflection upon the symptoms observed in the patient and the cause of the illness interpreted in terms of the native notions of disease causation. Thus, the anxiety aroused is intimately connected with a cultural variable.

There is a correlative fact, however, which gives *social* significance to the affect generated. Disease situations of any seriousness carry the implication that something wrong has been done. Illness is the penalty. Consequently, it is easy to see why illness tends to precipitate an affective reaction to a culturally defined danger situation. Furthermore, a closer examination of the dynamics of Saulteaux society reveals the fact that fear of disease is the major social sanction operative among these Indians. In this society, certain classes of sexual behavior¹³ (incest, the so-called perversions in heterosexual intercourse, homosexuality, autoerotism, bestiality), various kinds of aggressive behavior (cruelty to animals, homicide, cruelty toward human beings, the use of bad medicine to cause suffering, rough or inconsiderate treatment of the dead, theft and a number of ego injuries like insult and ridicule, failure to share freely, etc.), behavior prescribed by guardian spirits, the acquisition of power to render specialized services to others (i.e., curing or clairvoyance), all fall under a disease sanction.

¹¹ The group that I have investigated personally lives on the Berens River.

¹² In a previous paper, "Fear and Anxiety as Cultural and Individual Variables in a Primitive Society," *J. Social Psychol.*, 1938, 9: 25-47, I called attention to this affective differential as an explicit example of how cultural variables not only define situations for the individual but structuralize them emotionally.

¹³ Cf. A. I. Hallowell, "Sin, Sex and Sickness in Saulteaux Relief," *Brit. J. Med. Psychol.*, 18: 191-199, 1939.

This leads us directly to the heart of one of the basic problems in the social sciences, viz., the determination of the specific conditions under which social codes are maintained and the means by which they operate under different cultural frames of reference. For despite the widest cultural variability in *homo sapiens*, we observe that all human societies are characterized by norms of conduct which, in MacIver's words, "assure some regularity, uniformity and predictability of behavior on the part of the members of a community."¹⁴ Sheer anarchy, or literal rampant individualism, is unknown.

But this problem is not wholly a sociological one. It has important and far-reaching psychological implications, particularly in view of the fact that in many nonliterate societies, the institutions we associate with the maintenance of "law and order" are unelaborated or even absent. In the case of the Saulteaux, e.g., there were no chiefs nor any kind of political organization in aboriginal days. Nor were there any institutionalized juridical procedures or jails.

The psychological aspects of social control become evident when we examine the relation between the social sanctions operative in a given society and the motivations of individuals instigated by the prevailing sanctions. As Radcliffe-Brown has pointed out¹⁵ "the sanctions existing in a community constitute motives in the individual for the regulation of his conduct in conformity with usage." Hence, there is an integral, inextricable relationship between sociological and psychological factors.

In Saulteaux society, it is not fear of the Gods or fear of punishment by the state that is the major sanction: it is the fear of disease.¹⁶ Or, putting it in the terminology already employed, the motivating factor is the affect connected with certain disease situations. Individuals in Saulteaux society are highly sensitized to anxiety as an emotional reaction to a danger signal, the precipitating cause being illness interpreted as punishment. The manifest danger to which the anxiety is directed is the direct threat to someone's well-being or even life. But there is also a menace to the social code which is

¹⁴ R. M. MacIver, *Society, its Structure and Changes* 248, New York, 1931.

¹⁵ A. R. Radcliffe-Brown, "Sanctions" in *Ency. of Soc. Sci.*: "What is called conscience is thus in the widest sense the reflex in the individual of the sanctions of the society."

¹⁶ In Radcliffe-Brown's terminology, disease is an example of a diffuse, negative sanction. Curiously enough, he does not mention disease at all in his article, despite the fact that it operates to some degree in many societies. Systematic attention has not been given to it as a sanction.

On the basis of the sketch of the Ojibwa given by Ruth Landes in *Cooperation and Competition among Primitive Peoples* (1937), Margaret Mead concludes (page 468) that "Although they know of and sometimes act in reference to concepts of social behavior characteristic of adjacent societies with higher integrations, they [the Ojibwa] lack effective sanctions to enforce any rule, either in mourning obligations or against incest or murder." Although Landes described Ojibwa in a different locale, the belief system and institutional set-up is equivalent to that of the Saulteaux. Mead's statement is, to my mind, completely misleading. A closer analysis would show, I think, that the disease sanction is both important and effective among all Ojibwa peoples.

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implied because some dissocial act has been committed. Insofar as individuals are motivated to avoid such acts through fear of disease, anxiety performs a distinct social function.

With this thesis in mind I should now like to analyze in more detail how disease operates as a social sanction in Saukteaux society in connection with anxiety-laden situations.

In the first place, health and a long life are very positive values to the Saukteaux. *Pimädoziwin*, life in the fullest sense, is stressed again and again in their ceremonies. The supernaturals are asked for it. It is a prime value. In psychological terms, it is a major goal response. Disease interferes with achieving this goal. Ordinary cases of illness, however, colds, headaches, etc., do not arouse anxiety among the Saukteaux any more than they do among ourselves. They are not danger situations. But the nature of disease is such that it may become a threat to life itself, may be a real danger to the human organism. Real or "normal" anxiety is appropriate in such circumstances.¹⁷

A comparable affect under equivalent circumstances is found among the Saukteaux and ourselves. In both cases, the danger threatened is met with what are thought to be appropriate measures. Most disease situations among the Saukteaux, however, do not conform to this type. They correspond either to the nondangerous variety or they rapidly pass from this type into situations where the anxiety level is not only high, but where the *quality* of the affect suggests neurotic anxiety without its actually being so. What are the conditions that bring this about? It is here that native beliefs about disease causation enter the picture.

In Saukteaux belief, one of the major causes of illness arises from what they term "bad conduct" (*madjijiwé boziwin*). "Because a person does bad things, that is where sickness (*ákwoziwin*) starts," is the way one informant phrased it. In other words, a person may fall ill because of some transgression he has committed in the past. It is also possible that an individual may be suffering because of the bad conduct of his parents. "When a man is young he may do something to cause his children trouble. They will suffer for this." Illness derived from this source is designated by a special native term (*odjineaiwaso*). Consequently, if a child falls seriously ill, it is often attributed to the transgression of a parent. It is easy to see the anxiety provoking possibilities in this theory of disease causation. In addition to the normal anxiety that the objective factors of the disease situation may stimulate, a sense of guilt may be aroused in one or both parents. They are bound to reflect upon what they may have done to cause their child's suffering, or even death. Their own acts are entangled with the disease situation.

Another cause of illness is witchcraft, the hostile action of some other human being. The significant fact to be observed in cases of this class is that

¹⁷ Cf. Joseph C. Yaskin, "The Psychobiology of Anxiety," *Psychoanalytic Rev.*, 1937, vol. 24, Supplement page 53.

the sick person almost always believes that his sickness is due to revenge. Some previous act of *his* has provoked retaliation in this form. Here the patient's own impulses, previously expressed in some form of dissocial behavior, are projected into the situation just as they are in those instances where disease is thought to have resulted from "bad conduct." In cases of witchcraft, the penalty that threatens has acted in a mediate fashion instead of automatically as in the instances where "bad conduct" is thought to be the source.

An illuminating clue to the psychological significance of disease situations interpreted as a result of the causes just cited is obtained if we follow Freud's differentiation of what he terms a *traumatic* situation from a simple *danger* situation. He introduces this distinction by asking what the kernel of the danger situation is.¹⁸ He finds that it revolves about the estimation of our strength in relation to the danger. If we feel a sense of helplessness in the face of it, an inability to cope with it, then he calls the situation *traumatic*. This is precisely the differentiation that applies to those disease situations among the *Saulteaux* where the cause of the illness is uncertain and obscure. In these situations, the quality of the anxiety aroused is different from that where illness is faced in the same way any danger situation is faced. It is disease situations of this *traumatic* type that operate as a social sanction.

The qualitative aspects of the anxiety aroused emerge from the combination of two determinants. The first is purely objective: ordinary medical treatment of the sick person has failed to produce improvement. The symptoms persist or the person gets worse. It is at this point that the situation becomes serious. Prior to this, the illness may not even have been considered dangerous, but when the medicine does not work, the situation rapidly becomes traumatic. This is because the suspicion is aroused in the patient or his associates that the cause of the illness is hidden. It may be a penalty for something done in the past. It may be due to "bad conduct" or witchcraft. But who knows? Yet if this is so, his very life is in jeopardy. Consequently, a feeling of helplessness arises which can only be alleviated if the precise cause of the sickness is discovered. Otherwise, appropriate measures cannot be undertaken. Meanwhile, the source of the danger remains uncertain and obscure; further suffering, even death, menace the patient.

Thus, while from an objective point of view we often may have displayed what seems to be a "disproportionality of affect" in disease situations, at the same time the definition of such situations in terms of *Saulteaux* beliefs presents dangers that are not comparable to those we would recognize in similar situations. This is an important qualitative difference. The affective reactions of the *Saulteaux* are a function of this difference.¹⁹

¹⁸ Freud, *op. cit.*, 149.

¹⁹ Cf. Mowrer, *op. cit.*, pages 563-564 who points out that "... experienced anxiety does not always vary in direct proportion to the objective danger in a given situation, with the result that living organisms, and human beings in particular, show tendencies to behave 'irrationally,'

It would also appear that there are some analogies, although by no means an identity, between the anxiety created in some of these traumatic disease situations among the *Saulteaux* and neurotic anxiety. This is true, at least, in the cases where the danger that threatens is believed to have arisen out of the patient's own acts, so there is the closest integral relation between inner and outer danger as in neurotic anxiety, but there are no substitute formations in the individual which project the danger outwardly, as in animal phobias, while the real source of danger remains unknown. Nevertheless, it is true that the impulses of the individual become the *sine qua non* of the external danger, just as in neurotic anxiety. Consequently, these impulses are the ultimate source of the danger itself. The disease is not considered to be impersonal and objective in origin and for this reason it cannot be faced in the same terms as other kinds of illness or other objective hazards of life. The real source of danger is from within and, like neurotic anxiety, it is connected with forbidden acts.

Take the case of an Indian who believes himself bewitched, for example. At the first appearance of his illness, he may not have been worried because he may have thought that there was some other cause of his trouble, but as soon as he believes he is the victim of a hostile attack, he gets anxious. Why? Because he believes his illness is in retaliation for some previous act of aggression he has perpetrated. The assertion of these aggressive impulses on his part has led to a feeling of guilt and the illness from which he is suffering has aroused anxiety because he senses danger. His very life may be threatened. What this man fears is that he had endangered his life by acting as he did. He is afraid of the consequences of his own impulses. The source of the outwardly sensed danger lies in his own hostile impulses.

So far I have tried to explain how anxiety is integrated in disease situations among the *Saulteaux* and why it is that the emotion generated has qualitative features which suggest neurotic anxiety. I hope that I have made it clear, however, that these features are only analogies deduced from the manner in which the belief system of the *Saulteaux* compels the individual to interpret the objective aspects of disease situations under certain conditions. What we actually appear to have exhibited in these cases is an affective reaction on a fear-anxiety continuum that lies somewhere between true objective anxiety and real neurotic anxiety.²⁰ That this is indeed the

i.e., to have anxiety in situations that are not dangerous or to have no anxiety in situations that are dangerous. Such a 'disproportionality of affect' may come about for a variety of reasons, and the analyses of these reasons throws light upon such diverse phenomena as magic, superstition, social exploitation, and the psychoneuroses."

²⁰ While not offered in direct support of our contention, the following remarks of Freud (*op. cit.*, 148) seem worth citing: "There are cases in which the attributes of true and of neurotic anxiety are intermingled. The danger is known and of the real type, but the anxiety in regard to it is disproportionately great, greater than in our judgment it ought to be. It is by this excess that the neurotic element stands revealed. But these cases contribute nothing which is new in principle. Analysis shows that involved with the known reality danger is an unrecognized instinctual danger."

case is supported by the fact that, on the one hand, we can point to occurrences of real anxiety in danger situations among the Saulteaux and, on the other, to cases of neurotic anxiety. An instance of the latter is the behavior of a man I have described at some length in another publication.²¹ Among other things he had severe phobic symptoms, a kind of agoraphobia and fear of the dark. "Ask J. D. to go and fetch a kettle of water for you some night," one of the Indians said to me, "you'll find that he will refuse even if you offer to pay him well for it." Eye witnesses also told me the following episode. Once when J. D. was travelling in winter with some other Indians, the party was attempting to reach their camp late at night because they had no blankets with them. Before darkness fell, J. D. insisted that they help him collect birch bark so that torches could be made to carry with them during the rest of the journey. The bark was collected and the torches made but every now and then the wind would blow them out. When this happened and they were plunged in darkness, J. D. would fall to the ground and writhe and scream "like a crazy man."

The point I wish to emphasize particularly is that at both extremes of the fear-anxiety continuum the main function of the affect has reference to the individual alone. This is true whether he runs away from some objective danger or develops phobias which are reaction formations in self-defense against some instinctual danger. The anxiety associated with disease situations among the Saulteaux, on the other hand, has a social function insofar as it motivates individuals to avoid the danger (disease) by conforming to the dictates of the social code. This is accomplished by forcing the individual to reflect upon disapproved acts under the stress of the anxiety aroused by a disease situation or to anticipate possible discomfort through a knowledge of the experience of others. In either case, the disease sanction encourages the individual to be responsible for his own conduct.

The full implications of the social function of anxiety in Saulteaux society can best be exposed, however, if we return to the traumatic disease situation and inquire what steps are taken to reduce anxiety in the individual. I have already pointed out that, in such situations, the cause of the disease is at first problematical although the suspicion is aroused that the patient himself or some other person is responsible for the illness. This means that the true cause of the trouble must be sought before the disease can be alleviated. Once the cause of the illness is discovered, the disease situation loses some of its traumatic quality because the danger can be squarely faced like any other danger and some action taken to meet it. The therapeutic measures employed can be looked upon as anxiety-reducing devices.

Now one of the distinctive features of the Saulteaux belief system is this: if one who is ill because of "bad conduct" *confesses* his transgression, the medicine will then do its work and the patient will recover. This motion is

²¹ Hallowell, "Fear and Anxiety," etc., *op. cit.* 41-45.

the most typical feature of the operation of the disease sanction in cases where the penalty threatened is automatically induced. In fact, it adds considerable force to the sanction so far as the individual is concerned. It means that deviant conduct may not only lead to subsequent illness but that in order to get well one has to suffer the shame of self-exposure involved in confession. This is part of the punishment. Since it is also believed that the medicine man's guardian spirits (*pawáganak*) will inform him of the cause of the trouble, there is no use withholding anything.²² At the same time, confession provides the means of alleviating the guilt and anxiety of the individual, because, if a feeling of helplessness or being "trapped" is an intrinsic factor in these traumatic situations (or in any severe anxiety situation), confession provides a method of escape according to both Saulteaux belief and sound psychological principle.

From the standpoint of Saulteaux society as a whole, confession is also a means by which knowledge of confessed transgressions is put into social circulation. Confession among the Saulteaux is not equivalent to confession to a priest, a friend, or a psychoanalyst in western culture. In our society, it is assumed that what is exposed will be held in absolute confidence,²³ but among these Indians the notion is held that the very secrecy of the transgressions is one of the things that makes them particularly bad. This explains why it is that when one person confesses a sexual transgression in which he or she has participated with a second person, the latter will not become ill subsequently or have to confess. Once the transgression has been publicized, it is washed away or, as the Saulteaux phrase it, "bad conduct will not follow you any more."

Perhaps this attitude towards what is secret is connected with the lack of privacy that is intrinsic to the manner in which these people live. Anything that smacks of secrecy is always suspect. There is even an aura of potential menace about such things, fortified no doubt by the covert practice of magic and sorcery. Consequently, in disease situations where any hidden transgression is thought to be the cause of the trouble what is in effect a public exposure is a necessary step to regaining health.

In actual practice, this works out in a very simple way. When anyone is sick, there is no isolation of the patient; on the contrary, the wigwam is always full of people. Any statement on the part of the patient, although it may be made to the doctor, is not only public but also very quickly may become a matter of common gossip. Where conjuring is resorted to in cases where all other efforts have failed to reveal the hidden cause of the malady,²⁴

²² There seems no doubt that this belief also opens the door wide to the use of suggestion on the part of the native doctor.

²³ R. Pettazzoni, reviewing the ethnography of confession (*La Confession des Péchés*, Paris, 1931), makes the point that "la confession des primitifs en général n'est pas secrète," 128 ff.

²⁴ Conjuring involves appeal to supernatural entities. The "bad conduct" of a parent may be discovered by this means and sometimes the spirits of the dead may be invoked for con-

almost the whole community may be present en masse. Under these conditions, to confess a transgression is to reveal publicly a secret "sin." Consequently, the resistance to self-exposure is very great and the shame experienced by the individual extremely poignant. In terms of our own society it is as if the transgressions committed were exposed in open court or published in the newspapers so that everyone knew that Jerry had slept with his sister or that Kate had murdered her child. Among the Salteaux, however, it is only after such a confession is made that the usual medicine can do its work and the patient can recover. In one case, three children of a married couple were all suffering from a discharge of mucous through the nose and mouth. They had been treated by a native doctor who was also a conjurer but his medicine had done no good. Finally, a conjuring performance was held. Despite the fact that the woman's husband, who was present, had threatened her with death if she ever told, she broke down in a flood of tears and confessed to everyone that he had forced fellatio upon her.

This public aspect of confession is one of the channels through which individuals growing up in Saulteaux society and overhearing the gossip of their elders *sense*, even though they may fail to understand fully, the general typology of disapproved patterns of behavior. Children do not have to be taught a concrete panel of transgressions in Saulteaux society any more than in our own. Nor does it have to be assumed that they have been present on numerous occasions when transgressions have been confessed. Even if they are present, they may not always understand what is meant. Yet some feeling is gained of the *kind* of conduct that is disapproved. The informant who told me about the case of fellatio was present at the conjuring performance when this was confessed. She was about ten years old at the time and did not understand what was meant until later when her step-mother enlightened her.

In actual operation, the disease sanction among the Saulteaux does not completely deter individuals from committing socially disapproved acts but it functions as a brake by arousing anxiety at the very thought of such conduct. Functionally viewed, a society can well tolerate a few breaches of the rules if, through some means such as confession, a knowledge of dissocial conduct is publicized with the result that a large majority of individuals follow the approved types of behavior.

These deductions are by no means theoretical. That individuals in Saulteaux society actually are deterred from acting in forbidden ways by the disease sanction is illustrated by the following story.²⁵ In this case, illness

sultation if this seems relevant. Cf. A. I. Hallowell, "The Role of Conjuring in Saulteaux Society" (Ms.) and "The Spirits of the Dead in Saulteaux Life and Thought," *Royal Anthropol. Inst. of Great Britain and Ireland* (In press).

²⁵ Cf. Mowrer, the *op. cit.*, 558. "This capacity to be made uncomfortable by the mere prospect of traumatic experiences, in advance of their actual occurrence (or recurrence), and to be motivated thereby to take realistic precautions against them, is unquestionable a tremendously

did not follow incestuous intercourse. Perhaps this was because it occurred only once. In fact, this may be the moral of the story from the point of view of the Saulteaux themselves. At any rate, it gives a very clear picture of the conscious conflict between the impulses of the individual and socially sanctioned modes of conduct.

An unmarried woman had "adopted" her brother's son, a boy who was already a fairly good hunter.²⁶ They were camping by themselves alone in the bush. The boy had shot some meat and they were drying it. One night after they both lay down to sleep, he began to think about his *kisagwas*.²⁷ After awhile he spoke to her. "How's chances?" he said.²⁸ "Are you crazy," she replied, "to talk like that? You are my brother's son." "Nothing will happen to us," the boy said. "Yes, there will," said his aunt, "we might suffer." "No we won't. Nothing will happen," her nephew replied.

Then he got up, went over to where she was lying and managed to get what he wanted. After he had finished, he went back to his own place and lay down again. He could not go to sleep. He began to worry about what he had done to his father's sister.

In the morning he said to her, "I'm going now." "Where?" she asked. "I'm going to live somewhere else, I'm ashamed of what I did. I'm going away. If I starve to death, all right." "No! No! Don't go," said his aunt, "If you leave who is going to make a living for me? I'll starve to death. It's not the first time people did what we did. It has happened elsewhere."

But the young man was much worried and determined to go. "No, you can't leave me," said his aunt, "I've brought you up and you must stay here." "I'll go for awhile, anyway," the boy said. "All right," said his aunt, "Just for a short time. No one knows and I'll never tell anyone. There might come a time to say it, but not now."

So the young fellow went off. He came to a high rock and sat down there. He thought over what he had done. He was sorry that he did it. He pulled out his penis and looked at it. He found a hair. He said to himself, "This is *nisagwas*, her hair." He threw it away.

That night he camped by himself, half thinking all the time that he would go back to his aunt. In the morning, he did go back to where they had their camp. He arrived at sundown.

All during the night he was away his aunt had been crying. She was so very glad to see him now. He said to her, "I wonder if it would be all right if we lived together, just as if we were man and wife." "I don't think so," the woman said. "It would not look right if we did that. If you want a woman you better get one for yourself and if I want a man I better get one."

The trouble was this young man had tasted something new and he wanted more of it. He found a girl and got married in the spring. He and his wife lived with his aunt. Later his aunt got married, too.

important and useful psychological mechanism, and the fact that the forward-looking, anxiety-arousing propensity of the human mind is more highly developed than it is in lower animals probably accounts for many of man's unique accomplishments. But it also accounts for some of his most conspicuous failures."

²⁶ Probably 17 or 18 years of age. His aunt was not an "old" woman, I was told.

²⁷ The term for father's sister and also for mother-in-law. Because of mother-in-law avoidance there was a double barrier to any erotic behavior.

²⁸ The local English vernacular.

The narrator commented that the boy's aunt was a sensible woman. They just made one slip and then stopped. This may explain why nothing happened to them, *i.e.*, neither one got sick and had to confess.

Among the Saulteaux, then, desire for *pimādoziwin* can be assumed to be a major goal response. Everyone wants to be healthy, to live long and to enjoy life as much as possible. In order to achieve this aim, certain kinds of conduct should be avoided, not only for one's own sake, but for the sake of one's children. If one does commit transgressions and then falls ill, or if one's children become ill, it is better to suffer shame than more suffering or even death. This is the setting of confession and its individual motivation.²⁹ Confession, in turn, by making public the transgression committed permits the individual to recover. This is its ostensible purpose. But confession has a wider social function. It makes others aware of disapproved types of conduct which act as a warning to them. At the same time, since patients who confess usually recover, the publicity given to such cases supports both the native theory of disease causation on which the sanction rests, and the efficacy of confession itself. So while most individuals are motivated to avoid the risk of illness, there is consolation in the fact that even if one's sins find one out, there still is a means of regaining health.

In some traumatic disease situations where witchcraft is thought to be the cause of the illness, the anxiety of the patient and his associates is relieved by the removal of a material object from the patient's body by the doctor. This type of therapy is based upon the belief that it is possible to project material objects into the body of a person that will cause illness. Once the object is removed the patient is reputed to recover. The sociopsychological reverberations of cases diagnosed as due to witchcraft are much the same, however, as those in which confession has occurred. This follows because the same factors are involved: (a) a disease situation that requires explanation in terms of some previous behavior on the part of the patient; (b) the selection, perhaps with the help of the doctor, of some offensive act that is brought forward because the patient feels guilty about it; (c) the dissemination of the cause of the illness through gossip about the case; (d) the resulting publicity given to socially disapproved types of conduct that act as a warning to others.

We can see, then, how the therapeutic measures utilized by these Indians

²⁹ Among the Saulteaux there is absolutely no connection between confession and the Supreme Being, so that the disease sanction is not in any sense religious. Attention is drawn to this fact because of P. W. Schmidt's categorical interpretation of certain religious aspects of the *Urkulturen* to which, in his opinion, the Northern Algonkian peoples belong. Cf. Pettazzoni, *op. cit.*, 151-152, who discusses this problem. He stresses the dissociation of confession and supreme deities or supernaturals of lesser rank except in a few cases. After referring to these, he goes on to say that, "dans le reste des cas dont nous avons connaissance—c'est-à-dire le plus souvent—la confession a lieu en dehors de toute intervention directe ou indirecte d'êtres divins."

in traumatic disease situations have the social function of anxiety-reduction, although this is not their ostensible purpose from the standpoint of the Saulteaux themselves. We can likewise understand how it is that in a society where so much anxiety is associated with disease that the persons who specialize in curative methods are individuals who enjoy the highest prestige. In psychological terms, this prestige accrues to those who are instrumental in reducing anxiety.

It is impossible to discuss here all the further ramifications of the functional aspects of anxiety, but we may point out that the whole magico-religious apparatus of the Saulteaux is a complex anxiety-reducing device.³⁰

In summary, the thesis of this paper is that, by its very nature, disease may arouse "normal" or objective anxiety, but among the Saulteaux, native theories of disease causation invest certain disease situations with a traumatic quality which is a function of the beliefs held rather than of the actual danger threatened by the illness itself. The quality of the anxiety precipitated in the individuals affected by such situations suggests neurotic rather than objective anxiety because the ultimate cause of the disease is attributed to the expression of dissocial impulses. The illness is viewed as a punishment for such acts and the anxiety is a danger signal that heralds the imminence of this penalty. Insofar as individuals are motivated to avoid dissocial acts because of the penalty anticipated, the pseudoneurotic anxiety aroused in disease situations has a positive social function. It is a psychic mechanism that acts as a reinforcing agent in upholding the social code. Thus, in a society with such a relatively simple culture and one in which formalized institutions and devices for penalizing the individual for dissocial conduct are absent, the utilization of anxiety in connection with disease is an extremely effective means for supporting the patterns of interpersonal behavior that make Saulteaux society a going concern.

Finally, I should like to point out that this role of anxiety in Saulteaux society is consonant with the results that are emerging from certain researches in contemporary experimental psychology.³¹ It has been found possible in Mowrer's view to recast the Freudian theory of anxiety in stimulus-response terms and to set up hypotheses which can be tested. In this paper, I have attempted to show how such a hypothesis is useful in interpreting observations made in a primitive society.

³⁰ Cf. R. R. Willoughby, "Magic and Cognate Phenomena: an Hypothesis," in *A Handbook of Social Psychology*, Carl Murchison, ed., Worcester 1935.

³¹ Cf. O. H. Mowrer, *op. cit.*, 564, and his "Preparatory Set (Expectancy): Some Methods of Measurement," *Psychol. Monographs*, 52: 1-2, 39, number 2, 1940 and "Preparatory Set (Expectancy): A Determinant in Motivation and Learning," *Psychol. Rev.*, 1938, 45: 62-91.

CURRENT ITEMS

Communication. This note was first received from Mr. Anderson on June 16, 1941. Condensation was suggested and so publication was delayed. The date is mentioned for the benefit of historians in case Mr. Anderson succeeds in adding a new term to the vocabulary of sociology.—R.B.

A NOTE ON THE PHENOMENA OF SOCIOLOGY

Science is the measurement of reappearing facts relative to a specific body of phenomena in order to discover the principles by which these phenomena operate so as to predict their behavior. Sociology as a science would consist, if this statement is correct, of the measurement of reappearing facts relative to "sociological" phenomena in order to discover the principles by which these "sociological" phenomena operate.

But the question arises at once as to what are the "sociological" phenomena? Here the sociologists show much confusion. Some tell us that "groups" are the phenomena of this science. Others say "the analysis of the forms of human association" are its object matter. Others point out that the phenomena are the "social phenomena" and use "social" and "sociological" synonymously. If the science of sociology is to encompass the measurement of reappearing facts relative to all the phenomena of the social world, which is what is usually meant by "social" phenomena, its area of operation would be extremely vast and all the other so-called "social sciences" would simply be aspects of it. It then becomes the over-all synthesizer. This is what some say sociology is. Because what is produced by man in his interrelations with men and things takes on social characteristics and becomes a part of the social environment or "culture," some say "culture" is the subject to be studied and make sociology the science of "culture." Consequently, this inability clearly to set forth what the phenomena of this science are, leads directly to contradiction and endless argument and does not promote the "science" of sociology.

To illustrate the fact that sociologists are not certain of what sociology is and are not yet agreed about the phenomena it studies or the area it covers, many illustrations might be given. Here we will refer to the last two and most popular of the general sociology textbooks published. After 50 years of textbooks in the field, it is reasonable to expect that the last and most popular ones would indicate with some clarity what the phenomena of this science are and build conceptual frameworks around them. Sutherland and Woodward and Ogburn and Nimkoff have recently published books that cover the subject "General Sociology" and both are excellent in many ways.

When Sutherland and Woodward face the problem of limiting the area of their science, they clearly avoid the issue by saying, "To the question, What is sociology, the whole book is the best answer." . . . Now "the whole book" includes a study of "Culture," the analysis of which is Anthropology. It also includes "Personality," which is psychology and social psychology and many other topics. Thus, when the student has completed the book, he finds that sociology deals with everything in the social world.

Ogburn and Nimkoff are even less definite. They do not attempt to limit their analysis to a description of "sociological" phenomena. They say, "Sociology has been defined as what the sociologists are doing, and a book on sociology should mirror such activities"—and they do, in over 900 pages, try to include everything

the sociologists have done, using the same general "outline" as Sutherland and Woodward. The book has no sociological framework, but is largely a description of what appears to be going on in society in terms of cultural conditioning.

It is therefore understandable why other scientists say "Sociology is not a science, since it has no body of phenomena that are its domain of study and about which generalizations are deduced in relation to a conceptual system."

There are sociologists who have insistently held to the proposition that sociology as a science will make progress only as it sticks strictly to sociological categories and describes their forms and functionings. To them, sociological phenomena are the entities that result from interactions between persons. Outstanding among these are Simmel, von Wiese, and Znaniecki. Many others have followed this lead and expressed the idea that this is correct; but they usually have dropped the matter at that point.

Sociologists think with concepts as do other scientists; therefore, conceptual expression is essential to the development of the science. It is the contention of this statement that an important reason why sociology has not stuck to "sociological" phenomena and described their structure and functioning is that sociologists have possessed no word in which the descriptive phrases "human relationship structures" or "forms of human association" can be expressed so as to synthesize them into a single concept that is precise, contains a final idea, is perfectly general, and is fundamental to the particular field.

A thing or a related number of things can be given any name and it would suffice, if its users have the same understanding of its content and if it meets the above stated criteria. In many sciences, this happens and concepts are expressed by words which embody the names of persons or objects. In some cases they are words from other languages or even letters from an alphabet to which precise meaning has been given. In sociology, Sumner's concept "mores" is an illustration. The major purpose here is to suggest a word that has been successfully used in graduate seminar work to give a single conceptual expression to these phenomena. The word is HURELURES. It has three syllables, Hu-rel-ures, and should be pronounced, "Hu" as in "human," "rel" as in "relative," and "ures" as in "structures," thus having the emphasis on the second syllable, Hu-rel-ures.¹ Sociology then is the science that describes the forms and functions of the Hurelures.

The originators of terms like "forms of human association," "human relationship structures," "plurality patterns" indicate that they include in the terms all of the entities that result from interhuman relationships and say that they are the phenomena of the science. With this the writer has stated his agreement. However, all of these are phrases and are somewhat cumbersome. No one of them has come into general use, perhaps just because they are not brief, simple, and a single word.

The term "Hurelures" is, obviously a word created by condensing the phrase, Hu-man Rel-ationship Struct-ures. It is defined to include all the forms of human association that result from the interrelationships of men in society. It is these "forms," these "structures," these "Hurelures" that are the phenomena the sociologist describes when he wishes to analyze the units of which society is composed and at last society itself.

Now, if one asks, what classes of structural entities are discerned in society and, therefore are the phenomena to be included in the concept, "Hurelures," they may be classified as follows:

¹ I find it almost impossible not to pronounce this word hū're-lures and thus violate the inventor's logic. Inventors should give attention to such matters as I'm sure Sumner did not when he invented "mores." I find it almost impossible to make students say "mos" instead of "moray." Why not "hu-rel'tures" if you want the accent on the second syllable?—R. B.

THE HURELURES

1. Groups
 - a. Consisting of any unit of two or more persons influencing each other on the mental plane.
 1. The Pair; the Triad; Patterned; Non-Patterned; Primary; Genetic; and many others.
 - b. A major task yet to be accomplished in sociology is to describe and classify this form of Hurelures.
2. The Ecological Entities
 - a. Those units of human relationship within contiguous spatial areas acting as corporate entities: Neighborhood; Community; Region, etc.
3. The Institutions
 - a. Those crystallized mechanisms which serve some social interests by conserving the forms of interhuman behavior fixed in the mores and maintaining them through definitely patterned interhuman structures.
 - b. Five of the chief social institutions are: Family; Church; Government; Industry; School.
 - c. There are many others, in addition, such as marriage, private property, and worship forms, art, health, science, social work, etc.
4. Collectivities
 - a. Those interhuman behavior entities in which the relationships between the individuals that compose them are difficult of perception, because they are not closely related to the corporeal and tangible (von Weise and Becker, p. 562).
 - b. Among these are: Crowds; Classes; Nations; Political Parties; the State, etc.

Sociology, then, when defined as the science that describes the forms and functioning of the *Hurelures*, focuses upon these groups, the ecological entities, the institutions, and the collectivities found in society; it describes and measures the facts that are related to their forms and functions and so finally leads to the discovery of the principles by which they operate.

W. A. ANDERSON

Cornell University

ANNOUNCEMENTS AND MEETINGS

American Council on Education, 744 Jackson Place, Washington, D. C., has issued two pamphlets to help teachers in dealing with international problems. *The Teacher and International Relations* (24 pages, 10 cents) suggests a point of view and methods of procedure. *American Isolation Reconsidered* (208 pages, 50 cents) traces the history of American neutrality from 1793 to 1941, with especial emphasis on the period 1914-1941. It contains more than 60 pages of original documents related to these issues. Good bibliographies are appended to both pamphlets.

American Friends of Polish Democracy, 55 West 42nd Street, New York, has issued a "Manifesto to the Peoples of the World." It is a most eloquent illustration of what the Institute for Propaganda Analysis, I am sure, would call "Good" propaganda. The above organization also publishes a Press Bulletin called *Poland Fights*. Robert M. MacIver is Chairman, and the list of first sponsors contains such names as Morris R. Cohen, Harry Gideonse, F. LaGuardia, Walter Willcox, Ernest Nagel, Robert M. Lovett, and Gunnar Myrdal. George Counts, David Dubinsky, Paul Kellogg, and Frank Kingdon are on the Executive Committee.

American Sociological Society has added Leroy E. Bowman, 112 E. 19th Street, New York, and Hugh N. Fuller, Emory University, Atlanta, Ga., to its 1941 membership list.

Breakfasts have been arranged for 8:30, Dec. 28, by Alpha Kappa Delta, Harvard Uni-

versity, Mid-West Sociological Society, University of Minnesota, and University of North Carolina; on Dec. 29, at 8:00, Ohio Valley Sociological Society, Southern, and Eastern (probably). University of Chicago will also have a breakfast.

The Society will meet in the Roosevelt Hotel, New York City, Dec. 27-29, 1941.

American Statistical Association. Frederick F. Stephan, of Cornell University, has been appointed chairman of the new Committee on Sampling. William F. Ogburn, of the University of Chicago, has been appointed chairman of the Census Advisory Committee, to succeed the late Robert E. Chaddock. Other sociologists or sociologically minded men on this committee are Luther Gulick and Frederick F. Stephan.

Of the fifteen articles in the September, 1941, *Journal of the A. S. A.*, I think at least eleven should be read by sociologists, especially if they are interested in population and other Census material. One of the most interesting ones is by F. E. Croxton, "Toward Standardized Symbols for Basic Statistical Concepts," pages 426-28. Of 27 concepts used in five texts, only two, Σ and f , were uniform, though N occurred in four—but one text used n ; abbreviations for mode and median were sufficiently uniform so that no confusion could arise; σ occurred in all, but s and σ_s were also used. There is no (or little) confusion about the meaning of the concepts but lack of standardized notation makes the going difficult for the mathematically unskilled.—R.B.

Alpha Kappa Delta will hold its annual business meeting in the Roosevelt Hotel New York, Dec. 28, 1941, at 4:00 P.M.

Census of Research, August 1941 issue of the *Review*, page 557, item 251, should have read "A study of language as social environment rather than as meaning."

The Chicago Recreation Commission Bulletin, Number 32, July 29, 1941 (1634 Burnham Building) contains a report of Hugh E. Young, chief engineer of the Chicago Plan Commission, relative to the standards and actual conditions with reference to parks and playgrounds in Chicago. It contains interesting and valuable information.

Committee on Conceptual Integration will hold two meetings in the Roosevelt Hotel: Dec. 27 at 10:00 A.M., and Dec. 28 at 4:00 P.M.

Consumers Union of the United States, Inc., 17 Union Square, New York, is preparing consumer class plans for use in the schools. Many of the topics might be useful to teachers of social studies in high schools and might even be used in some college classes. Sample copies will be sent free on request.

Dictionary of American Scholars, Science Press, Lancaster, Pa., makes a pre-publication offer of \$6.00 and \$7.00 to those whose biographies are included; \$9.00 to libraries. It is understood that individuals who take advantage of this price will not turn over their copies to libraries. Post-publication cost of the book is \$10.00.

Inter-American Cultural Relations, U. S. Department of State. A pamphlet may be had for five cents which sets forth in some detail the program of the State Department for promoting American solidarity. It discusses travel grants and reviews what thus far has been done, gives the personnel of the advisory committees, and describes the cooperative activities with private agencies.

Dictionary of Sociology. The Philosophical Library is planning the publication of a series of scholarly dictionaries. The one on sociology will be edited by H. P. Fairchild of New York University.

The National Recreation Association held its twenty-sixth annual Congress at Baltimore, Maryland, Sept. 29 to Oct. 3, 1941, in the Lord Baltimore Hotel, on the general topic, "The America We Defend." In connection with the program, a pamphlet of questions was prepared which covers the discussion in the 42 sections—something over 450 questions. They may be obtained from the N. R. A., 315 Fourth Avenue, New York, at 75 cents for 10, \$1.50 for 25, and \$5.00 for 100. One could be had for a dime, I suppose. They would be useful instructional material in recreation or leisure classes.—R. B.

Ohio Department of Public Welfare publishes the *Quarterly Bulletin of the Managing Officers Association*. The June, 1941, issue contains a study by C. H. Growdon, "Some Observations on Juvenile Homicide," "The Community Adjustment of Sex-Delinquent Boys," by Ralph M. Stogdill and Charles A. Derthick, and "Juvenile Court Reporting in Ohio and Its Wider Relationships" by A. R. Schwartz.

It is free on request. Write to C. H. Calhoun, Bureau of Juvenile Research, Columbus, Ohio.

Ohio Valley Sociological Society presents abstracts of two papers given at its spring meeting in the October, 1941, *Ohio Valley Sociologist*. These are "Sociology of Music," by Paul Honigsheim, Michigan State College, and "Field Trips for Sociology Students," by Harold E. Adams, Western Reserve. There is also a report of the Conference on Graduate Work for Teachers in the Social Studies which will be of interest to all teachers of sociology.

Ohio Welfare Conference held its Fifty-first Annual Session at the Mayflower Hotel, Akron, Ohio, October 7-10, 1941. The Governor's Committee on Follow-up in Ohio of the White House Conference on Children in a Democracy met at the same time. The program was organized under eight main divisions, programs of the thirty associated agencies, eleven conference study courses (held on Oct. 6-7), and eleven main addresses in open sessions. To the general divisions and agency meetings, over one hundred addresses, papers, and discussions were presented. President C. C. Stillman spoke on "A Philosophy for the Social Worker."

Pan American Council of Chicago, 84 E. Randolph St., issues a *Bulletin* which contains a great deal of valuable information for those interested in the general field of inter-American relations. It may be had for ten cents a copy or a dollar a year to nonmembers, or free with an associate membership (\$2.50), regular membership (\$5.00), and on up to the exalted status of Patron, \$100.00 or more.

Sociologists who are interested in Spanish and Ibero-American problems will find the *Bulletin* of interest.

Propaganda Analysis, Institute for, 211 Fourth Avenue, New York, has issued its seventh packet of "Decide for Yourself." It deals with the Negro question especially as related to defense. There are over twenty items of propaganda, all pro-Negro except one—the front page of Talmadge's newspaper, *The Statesman*, July 22, 1941. The explanation offered for this one-sided presentation of propaganda is that "America has established a pattern of thinking about Negroes which is either accepted or uncritically followed by much of the White population . . . hence any groups interested in using the situation need not conduct an active propaganda; they need only to continue to maintain the custom."

My impression of these "Decide for Yourself" packets is that they are all "loaded" either by accident (unconsciously) or design. A reader will either be stronger in his support or opposition after having read the packet. If he is neutral to begin with, and is influenced at all, it will be in the direction of the Institute's ideology. There is little *analysis* of propaganda in these packets but merely a *presentation* of *selected* propaganda. If the Institute intends to be more than a purveyor of *selected and loaded* propaganda, it must present an equal amount of the strongest arguments for both sides. A good way to do this would be to ask the strongest proponents of both sides to do the selecting. Then the Institute could point out the mechanisms used by both sides, the over- and understatements, the fractional truths, and outright lies. The only kind of propaganda in which the Institute can engage, if it is to be different from any other pressure group, is propaganda for an objective, impartial, scientific analysis of propaganda. At present, especially in the "Decide for Yourself" collections, the Institute uses Card-stacking, Name-Calling, Transfer, and the other mechanisms it has defined.

The Institute admits its bias "in favor of the democratic freedoms and responsibilities as set forth in the Constitution of the United States." This adds up to nonsense, since most of the bitterest proponents of the most controversial issues can (and do) say the same thing with equal fervor. To measure the "goodness" and "badness" of propaganda in terms of democratic values is equally unsatisfactory since "democratic values" is merely an emotionally charged question-begging phrase—it is name-calling par excellence to accuse your opponent of menacing "democratic values."

The fallacy that underlies the whole conception of the Institute's program, as I have pointed out before, is its inadequate conception of propaganda—its assumption that propaganda may be "good" and "bad" in the normative sense, whereas it can be "good" and "bad" only in the operative sense, i.e., how effective it is in accomplishing its purpose. To call any and all attempts to change other people's acting or thinking "propaganda" is normative nonsense: it leads to the conclusion that *my* views are education, true religion, legitimate publicity, sound science, and decent and proper expressions of opinion and policy, while *your* views are "propaganda." In other words, the Institute accepts the epithetic connotation of propaganda and then tries to deal with it objectively—which is impossible. Two people with opposing views cannot agree as to what is propaganda unless they accept the views of Goebbels and the Catholic Church that *all* propagated ideas are propaganda. Even limiting it to controversial issues does not help, because there are differences of opinion about everything. Many third graders don't want to learn multiplication, so the teacher who tries to "change their minds" in this respect is a "propagandist" to all anti-multiplication third graders.

This logical difficulty can be avoided by defining propaganda operationally rather than normatively: Propaganda is the procedures used by individuals or groups to influence the public favorably toward the values of said individuals or groups without the public knowing the source of such influence. This immediately separates propaganda from publicity, news, education, religious teaching, political behavior, advertising, and so on, although propaganda may be (and is) used in all these fields. Propaganda is thus not defined by truth or falsity, "goodness" or "badness," nature of the appeals, objectives sought, etc., but solely by whether or not the identity and purposes of those trying to influence the public are known. This is the only definition I have heard which will enable two bitter opponents to agree upon whether or not a certain type of communication is propaganda. I submit it to the Institute to help it escape from the charge of being "merely another propaganda agency."

Peter H. Odegard, of Amherst, and Maurice R. Davie, of Yale, have been added to the Board of Directors, and Barrington Moore, Jr., formerly of Dartmouth, and Eleanor Flexner, to the Staff.—R.B.

Public Affairs Committee, 30 Rockefeller Plaza, New York, has issued Pamphlet 59, *Guns, Planes, and Your Pocketbook*, by Rolf Nugent of the Russell Sage Foundation. He estimates that the total defense bill as of the summer of 1941 will be about 45 billions, which is more than all the building in the U. S. since 1920, nearly twice the total railway investment, and more than twice the original value of all the automobiles now in use. In short, since we must have more guns, we must also have less "butter." This will mean severe taxation and cutting down consumer credit (which probably amounted to 10 billions in 1941, half of which was instalment buying). He also suggests that post-defense readjustment will be easier if industries have a backlog of unsatisfied consumer wants and needs, if a public works program is ready to start, if obsolescent plants are taken out of production, and if the policy of government spending is continued while the new order is being achieved.

Pamphlet 61, *Instalment Selling—Pros and Cons*, by William Trufant Foster, should be read in connection with the above. One of the ways to build the consumption backlog is to restrict instalment buying—but there are two—or several—sides to this. Mr. Foster gives a clear statement of the pros and cons and suggests ways of increasing the former and minimizing the latter. You can get them in quantity for less than 10 cents each.—R.B.

Rural Sociology has transferred its editorial office from Louisiana State University to the North Carolina State College at Raleigh. C. Horace Hamilton of N. C. State College is the new managing editor and all communications, including manuscripts should go to him.

Social Science Research Council announces its Post-Doctoral Research Training Fellowships, Pre-Doctoral Fellowships, and Grants-in-Aid of Research for 1942-1943. The closing date for applications for the first two is Feb. 1, 1942, and Jan. 15, 1942, for the grants-in-aid. Application blanks should be obtained from the Fellowship Secretary, 230 Park Avenue, New York, well before these dates and applicants should be careful to state age, academic qualifications, and tentative plans for study or research *at the time application blanks are requested*. THIS IS IMPORTANT. The Pre-Doctoral stipend is \$1800; Post-Doctoral, \$1800 (single), \$2500 (married); Grants-in-Aid, not to exceed \$1000.

A Conference on Social Statistics was held May 26-27, 1941, at Berkeley, California. The report, edited by Dorothy Swaine Thomas, contains a discussion of the fields of interest of social statisticians (or at least of the thirty who conferred), specific problems (twenty), and recommendations. This conference was held under the auspices of the Social Science Research Council, Pacific Coast Regional Committee, Subcommittee on Social Statistics.

The Conference concluded that a committee on social statistics is needed in the Pacific Coast Area and that its functions should be (1) to serve as a clearing house, (2) to hold conferences from time to time, (3) to pass on suggestions to appropriate agencies, and (4) to give advice when requested to individuals and agencies working in this field.

All sociologists would profit from reading this report.

The Society for Social Research held its twentieth annual institute at the University of Chicago, Aug. 15-16, 1941, on the general theme of "Morale" which was discussed from the points of view of ethnic groups, child development, the community, economic factors, crisis, population, communication, social psychiatry, and research. Thirty papers were presented by authorities in the various fields.

The Southern Conference on Tomorrow's Children held its third conference at Nashville, Tenn., on Oct. 30-Nov. 1, 1941. Eleven papers and addresses were given and discussed. Two sociologists were on the program: P. K. Whelpton, of Miami University (Scripps Foundation), who spoke on "Fertility Trends," and William E. Cole, University of Tennessee, who presided at one session. Mr. Cole is Executive Chairman of the Conference.

Women's Bureau, U. S. D. L., is issuing a series on the labor laws, both federal and state, that apply to women in the various states. So far, these pamphlets are available for Illinois, Kentucky, Maryland, Massachusetts, Michigan, New Jersey, New York, North Carolina, Ohio, Pennsylvania, and Tennessee. Eventually all the states will be covered. Hours, wages, industrial accident and disease, working conditions, collective bargaining, Social Security, and home work hours are given for each state. Each pamphlet contains a bibliography and specific directions as to which state and federal agency will furnish information on all of the factors discussed, including the workers' right to organize.

The Federal Public Contracts (\$10,000 and over) and Fair Labor Standards minimum wages are given for all covered occupations and also the state minimum wages for states having such a law. This series meets a need long felt by all who have worked in fields where such information is pertinent. It is to be hoped that a summary and comparative volume will be issued after the data are all in.

NEWS FROM COLLEGES AND UNIVERSITIES

University of Alabama. Harold L. Geisert has been granted a leave of absence for the present session to engage in research in Washington, D. C., in connection with the surveys of community facilities made necessary by the migration of workers to defense centers.

Robert H. Talbert, who for the past two years has been teaching at Hollins College in Virginia, has been appointed an instructor in sociology.

Howard H. Harlan, who was on leave last year for graduate study at the University of Virginia, has returned to the department.

Beloit College. Lloyd V. Ballard has been granted a year's leave of absence to serve as the Assistant Director of the Division of Child Welfare, Wisconsin State Department of Public Welfare. He will develop community organization and planning for the prevention of juvenile delinquency throughout the state.

Beloit College has called Herbert A. Miller to teach in place of Donald Webster, who is on leave in Washington as part of Donovan's Brain Trust which is planning for world organization after the peace. Webster will serve as specialist in Turkish affairs.

During the summer, Mr. Miller directed the American Seminar for Refugee Scholars and Artists at Plymouth, New Hampshire. There were 82 persons, in addition to Miller, who attended the entire nine weeks' session.

Butler University. Richard Dewey, who is completing his doctorate at the University of Wisconsin, and Gerard De Gré, who has completed the requirements for the Ph.D. at Columbia University, have been added to the staff.

Harvard University. E. P. Dutton and Company has published *The Crises of Our Age* by Pitirim A. Sorokin. This is the revision of the Lowell Lectures on *The Twilight of Sensate Culture* (1941) and contains material from several recent addresses.

C. C. Zimmerman is on leave to serve as a captain in the army. He is stationed at Fort Williams, Maine, as motor transportation officer for the Harbor Defenses of Portland, Maine.

University of California at Los Angeles. The new department of anthropology and sociology is staffed by Ralph Beals (U. of C. at Berkeley) and Harry Hoyjer (Univ. of Chicago) for anthropology and Constantine Panunzio (Brookings Institute) and Leonard Bloom (Duke Univ., but immediately from Kent State Univ.) for sociology. Work will be given at the graduate level in both fields.

Mr. Panunzio taught at Harvard during the summer session of 1941.

Hobart College, Geneva, New York. James Mickel Williams retired last year to become professor emeritus of sociology. The new department of economics and sociology is under the acting chairmanship of Leo Srole, assistant professor of sociology and anthropology, and at present includes Carl Beck Taylor as instructor in sociology, Brooks Otis as lecturer in sociology, and Stewart M. Jamieson as assistant professor of economics. It is planned ultimately to unite the departments of economics, sociology, and political science into one unified department.

Leo Srole (Ph.D., Chicago, 1939, former research associate at Harvard and Chicago, and visiting lecturer at New York University and Brooklyn College) was connected with the survey of Newburyport conducted by Lloyd Warner.

The department is planning a research program, the details of which will be reported later. The work of the department is closely integrated with the general social science program of the college which has been usually called the Citizenship Program.

Indiana State Teachers College, Terre Haute, has appointed Wilbur Brookover formerly of Butler University, to head up the work in sociology.

Kent State University. During the summer, John F. Cuber directed field work in educational sociology at the University of Michigan in the Kellogg Foundation Educational Workshop.

James T. Laing and John F. Cuber will be co-authors in a forthcoming volume, *Sociological Aspects of Education*, edited by Joseph Roucek (Crowell).

John F. Cuber will contribute chapters on "Institutional Disorganization and Social Control" and "The Family as an Agency of Social Control," in a symposium on *Social Control* to be published by Van Nostrom.

R. Drexel MacTavish, of Ohio University, and Harley Preston, of Indiana University, taught in the summer school.

James T. Laing was chairman of the Social Science Section at the spring meeting of the West Virginia Academy of Science.

Knox College, Galesburg, Ill. The American Council on Education in May, 1941, published *Thus Be Their Destiny*, a study of personality development of Negro youth in three communities. One of these communities is Galesburg, Ill., an important "underground railroad" center in *ante bellum* days. J. Howell Atwood, professor of sociology, is responsible for this section of the book.

Mr. Atwood was appointed Secretary-Treasurer of the Mid-West Sociological Society at its April, 1941, annual meetings.

University of Miami, Miami, Florida, has called Gildas Metour from Butler University, Indianapolis, where he was assistant professor.

University of Michigan. William Fuson (Ph.D., Wisconsin, 1941) has been appointed instructor. He will have charge of discussion sections of the introductory course and will give courses in social statistics.

Werner S. Landecker and Gilbert A. Sanford, teaching fellows last year, are both now located in other schools. Landecker is instructor in the University of Indiana; Sanford, assistant professor, University of Mississippi.

Richard C. Fuller taught during the summer session in the Northern State Teachers' College at Marquette.

Harvey J. Locke, of Indiana University, gave courses in the 1941 summer session in social psychology and collective behavior.

Hans Speier, of the New School for Social Research, taught in the summer school. He gave a course in social classes and one for graduates entitled "Public Policy in a World at War."

University of Mississippi. Paul B. Foreman, head of the department of sociology, attended the Population Research Institute directed by Warren S. Thompson and T. Lynn Smith at Louisiana State University during the spring of 1941 and taught both terms of the summer session at the University of Florida.

S. Earl Grigsby, of Cornell, and Gilbert Avery Sanford, of Michigan, have been appointed assistant professors of sociology.

The department of sociology has received a grant-in-aid for the current year from the General Education Board. This has made it possible to redistribute the teaching loads and to project certain studies in population and rural sociology. The staff of the department is co-operating with R. N. Whitfield, of the Bureau of Vital Statistics of the State Board of Health, in preparing a decennial audit of Mississippi Vital Statistics.

Morton B. King, Jr., who became head of the sociology department at Mississippi State College last February, has completed his field work on a study of local community and neighborhood structure in Lafayette County. This study was carried forward with the assistance of the Social Science Research Council.

Wm. M. Fuson has gone to the University of Michigan to teach social statistics.

A. B. Briggs has been appointed head of the department of sociology at Birmingham-Southern College.

University of North Carolina. President Queen has appointed Kathryn Jocher chairman of the Committee on Resolutions. Those who have preconvention ideas of what should be "resolved" should write to her at Chapel Hill, N. C.—R.B.

Ohio State University. L. A. Cook spent the summer teaching at the University of Chicago and participating in some workshops on the relations of school and community.

F. E. Lumley and Ina Telberg were in residence during the summer quarter.

J. G. Franz was in Chicago part of the time assisting E. W. Burgess with his studies on marriage.

Carl Nissen is on leave for the coming year at Denison University where he will substitute for F. G. Detweiler who is on leave from Denison for the first semester.

University of Pennsylvania. James H. S. Bossard has been elected chairman of the Social Science Division in the Graduate School.

Randolph-Macon Woman's College. J. Theodore Morgan has been appointed adjunct professor of economics and sociology.

Reed College, Portland, Oregon, has appointed Louis Gay Balsam as professor of sociology. He also will serve as dean of men.

Sweet Briar College, Virginia, has called Colterrohe Krassovsky to teach sociology during the academic year 1941-42. During the summer (1941), Mr. Krassovsky taught at the University of Virginia.

Western Michigan College. Edwin Lemert, formerly at Kent State University, has replaced Paul Meadows, who has joined the staff of Northwestern University.

Leonard Kercher collaborated on *Consumers' Cooperatives in the North Central States* published in May, 1941, by the University of Minnesota Press.

West Virginia University. E. M. Sunley, head of the department of Social Service Administration, has recently been appointed a member of the State Planning Board by Governor M. M. Neely.

T. L. Harris, as head of the department, is responsible for the administration of the pre-professional curriculum for prospective social workers.

OBITUARY NOTICE

H. HAROLD AXWORTHY (1892-1941)

H. Harold Axworthy, for eighteen years a member of the New York University faculty, died unexpectedly of heart disease August 2, 1941, at his summer home, Sag Harbor, Long Island.

Dr. Axworthy was appointed to the teaching staff of New York University in 1923. At the time of his death, he was chairman of the Student Affairs Committee of Washington Square College, chairman of the administrative committee of the department of sociology and anthropology, director of the Bureau of Community Service and Research, and director of the White Fund Camp maintained by the University at Bear Mountain Park for underprivileged children of the West Side. He was also chairman of the National Youth Administration Work Council of New York City and member of the Regional Committee of the N.Y.A.

Dr. Axworthy was born in West Orange on December 21, 1892. He attended the public schools of Montclair and New York University where he received his B.A., M.A., and Ph.D. degrees. He was appointed to the sociology faculty in 1923, his specialty being community service and social legislation, in which fields he became an authority and rendered long and valuable service both as teacher and as practical advisor and administrator for numerous social agencies.

In more recent years, he became especially interested in student activities and it was largely through his influence and leadership that the undergraduates of Washington Square College were given almost complete responsibility for student government. As a result of his efforts in student affairs, the seniors of Washington Square College dedicated the 1941 yearbook, *The Album*, to him as "... the individual who has been kinder, more sympathetic, more generous to the greatest number of students in our class ... [and who] understands young people and is respected by them."

As director of the University's Bureau of Community Service and Research, Dr. Axworthy in July, 1933, was responsible, with Mrs. Ida Cash, Brooklyn probation officer, for the establishment of the Toyery, a free lending library of constructive playthings for underprivileged children at 244 Spring Street. The Toyery idea was enthusiastically received and since 1933 many similar toy libraries have been created in New York City and throughout the country. At the opening of the first Toyery, Dr. Axworthy stated that "boys' and girls' everyday needs for constructive playthings are as essential to their normal development as bread and butter. Constructive play, such as the Toyeries will foster, not only develops character and ability, but is also an effective influence against criminal influence."

Dr. Axworthy is survived by his wife, the former Alice Keary of West Orange, whom he married in 1920, and three daughters, Jane, Sue, and Carole, aged 17, 15, and 12, respectively. All are students in the schools of Montclair, which long had been Dr. Axworthy's home.

Association for the Study of Negro Life and History. Negro History week will be celebrated Feb. 8-15, 1942. Posters and other literature may be obtained free of charge from C. G. Woodson, 1538 Ninth Street N.W., Washington, D. C. *The Negro History Bulletin* (monthly) may be had for one dollar a year. It is intended to popularize the study of Negro problems. *The Journal of Negro History* (quarterly) is a scholarly journal devoted to all aspects of Negro culture. It is \$4.00 a year.

Twentieth Century Fund is presenting a series of six broadcasts on the NBC Red Network Saturday afternoons, 3:00-3:15 E.S.T. on "Defense and Your Dollar." The first one, Dec. 6, dealt with "Defense and Your Market Basket" by Stuart Chase. Subsequent programs will deal with housing, personal debts, taxes, mortgages, and jobs. Copies of the script will be mailed free.

BOOK REVIEWS

BOOK REVIEW EDITORS

HOWARD BECKER AND THOMAS C. MCCORMICK
University of Wisconsin, Madison, Wisconsin

- Tomars: *Introduction to the Sociology of Art*. Wolfgang Stechow.....
Redfield: *The Folk Culture of Yucatan*. Harry Alpert.....
Sieber and Mueller: *The Social Life of Primitive Man*. Paul Honigsheim.....
Schwer: *Catholic Social Theory*. J. Milton Yinger.....
Fichter: *Man of Spain: Francis Suarez*. Floyd N. House.....
Belgodere: *La Verdad, La Ciencia y La Filosofia*. J. David A. Elmaleh.....
Sorokin: *Social and Cultural Dynamics*. R. M. MacIver.....
Sorokin: *The Crisis of Our Age*. Read Bain.....
Haydon: *Biography of the Gods*. John M. Mecklin.....
Eldridge: *New Social Horizons: Design for a Personality-Centered Culture*. W. E. Gettys.....
Willems: *Problemas de Uma Sociologia Do Peneiramento*. Rex D. Hopper.....
Benedict: *Race: Science and Politics*. J. H. Landman.....
Marett: *Race, Sex, and Environment. A Study of Mineral Deficiency in Human Evolution*.
Frank H. Hankins.....
Cantril: *The Psychology of Social Movements*. Theodore Abel.....
Britt: *Social Psychology of Modern Life*. H. H. Gerth.....
Stuart: *The Center, The Group under Observation, Sources of Information, and Studies in
Progress*; Jersild and Fite: *The Influence of Nursery School Experience on Children's
Social Adjustment*; Hardin, Chapman, and Hill: *Child Psychology: An Annotated
Bibliography*; Davis and McGinnis: *Parent Education: A Survey of the Minnesota
Program*. Ernest R. Mowrer.....
French: *Psychiatric Social Work*. Joseph Pessin.....
Prostitutes: *Their Early Lives*. By the Advisory Committee on Social Questions of the
League of Nations; Groves and Ross: *The Married Woman: A Practical Guide to
Happy Marriage*; Nelson: *Marriages Are Not Made in Heaven*; Bond, ed.: *The Good
Housekeeping Marriage Book: Twelve Ways to a Happy Marriage*; Wood: *Harmony
in Marriage*; Corbin: *Getting Ready to Be a Father*; Morgan: *The Family Meets the
Depression: A Study of a Group of Highly Selected Families*; Burrows: *The Basis of
Israelite Marriage*. Ernest R. Mowrer.....
Welton: *The Modern Method of Birth Control*; Fielding: *Parenthood: Design or Accident?*
A Manual of Birth-Control. Ernest R. Mowrer.....
Stix and Notestein: *Controlled Fertility. An Evaluation of Clinic Service*. Norman E. Himes
Graves and Hodge: *The Long Week End: A Social History of Great Britain, 1918-1939*.
Alfred McClung Lee.....
Guelich: *Die Bibliothek des Instituts für Weltwirtschaft: Voraussetzungen und Grundlagen
weltwirtschaftlicher Forschung*. H. H. Gerth.....
Jennings: *A Federation for Western Europe*. William Albigh.....

Unsigned Book Notes

- Baron: *Bibliography of Jewish Social Studies*.....
Strong: *Organized Anti-Semitism in America*.....
Beals and Brody: *The Literature of Adult Education*.....
Buchler, ed.: *The Philosophy of Peirce—Selected Writings*.....
Randall: *Making of the Modern Mind*. Revised Edition.....
Prentice: *The Ancient Greeks*.....
Michell: *The Economics of Ancient Greece*.....
Nilsson: *Greek Popular Religion*.....
Clapham and Power, eds.: *The Agrarian Life of the Middle Ages*.....
Homans: *English Villagers of the Thirteenth Century*.....

Sabine, ed: <i>The Works of Gerrard Winstanley</i>	928
Barzun: <i>Darwin, Marx, Wagner</i>	928
Wolfe: <i>Milton in the Puritan Revolution</i>	928

Introduction to the Sociology of Art. By ADOLPH SIEGFRIED TOMARS. 1940.

Privately printed, also available as Columbia University thesis. Pp. 420.

This reviewer is almost as afraid to put down his comments on this book as he was to read it in the first place. For he does not feel at home in sociology and, if possible, even less so in what used to be called esthetics. He is a mere art historian, which seems to entitle him to writing a review of the present book just as much as a sociologist seems entitled to review a book on Dürer. Yet he was lured into doing so by feeling that art historians should not only try to learn something about the sociology of art but also to voice their opinions about important attempts in that field. This is not a widespread tendency among art historians—for which they are duly taken to task by the author. This book should indeed be read by as many art historians as sociologists, and they should try to clarify their attitudes in its light, even if the attitude should remain, or even become, one of rejection. Only then it will become a better-founded judgment upon what has developed into a sound challenge to all who indulge in the historical research of specialized fields of human activity, esoteric though these fields may seem to be.

The scope of Tomars' book seems appallingly vast at first sight. It consists of nothing less than a complete survey of art in its relationship to every major sociological aspect. In order to be able to cover this immense area with any hope of relative completeness, the author proceeds on the lines of the system of sociology introduced by his "teacher and mentor," Robert MacIver. Consequently, the main parts of the book deal with communal art, class art, and associational art, the first being subdivided into civic art, national art, and inter-communal influences on art, the second mainly into corporate and competitive class systems and art, the third into influences of religion and state upon art. These are preceded by chapters on preliminary considerations and methodology, and followed by conclusions and implications.

A methodological question arises here. Was it wise to make an attempt towards such complete covering of what is conceded to be a virgin field of research (p. 16)? Would it not have been preferable instead to investigate one specific area of art or art history and to throw much needed light on that area from as many specific points of view as possible? (One such attempt was made in a book which has escaped the author's attention: Martin Wackernagel, *Der Lebensraum des Künstlers in der florentinischen Renaissance: Aufgaben und Auftraggeber, Werkstatt und Kunstmarkt*, Leipzig, 1938). Maybe so. Yet, such as it is, the attempt was made—an intelligent, sincere attempt by a man with wide interests and experience—and it seems to have brought a good many important results, even if some of them will remain unacceptable to many of us.

It appears that the supreme justification of this attempt was put forward by the author in his introductory and concluding chapters. This justification

he sees in the desperate clinging of artists, and art critics, to the "absolutist" position regarding the phenomena of beauty. "All scientific investigation of human institutions implies the relativistic position . . . The abandonment of absolutism in morality, ethics, and government has delivered these spheres of study from the sterile discussion of the concepts, the good, righteousness, sovereignty, etc., and has led to fruitful researches in political science, anthropology, sociology, and jurisprudence. Only the institution of art remains a haven for the discussion of absolutes by esthetic philosophers and critics of art. The present investigation may then be considered as an attack on the last great stronghold of the absolute" (p. 11). The distinction between the absolutist and relativistic position in art is taken up again at the end of the book (pp. 395 ff.) where it is considered as a legal dilemma (as contrasted with the hopeless impasse of the objectivist-subjectivist antithesis in esthetics), but at the same time considered *solved* by the introduction of the "concept of social relativism which is objective, as opposed to the subjectivity of individual relativism. . . . Like all other social standards, all group values and beliefs, they [i.e., the esthetic standards] exist as objective realities for the group." It is here that the author makes an extensive quotation (over eight pages of his book) from the *Anatomy of Criticism* by H. Hazlitt who had previously expressed this viewpoint most emphatically.

The author contends that this viewpoint is the only correct one, and it is on account of this sharply formulated claim that this reviewer pays his main attention to it without implying in the least that the bulk of the book is of little interest. If the author is right, the esthetician is out for good, the art critic is nothing but a mouthpiece for the artistic group standards of his place and time, and the art historian essentially a person who correlates the group standards which previous times and cultural realms developed with the sociological conditions under which they were made, placing the emphasis upon such works of the past as may, by virtue of similar conditions in his own time, be revalued again. Seen from this point of view, the pattern which the author displays in his main chapters—a historical pattern for the most part—is complete: an essentially "level" art history *sub specie societatis*. "The relevant question for criticism is then not . . . to ask . . . 'what is good art'? It is rather to admit that good art exists, but to remember to ask 'good art for whom, within what area of social consensus (sic!) and by what standards'?" (p. 397).

Now, in spite of a great number of excellent analyses with which the author backs up his approach, this reviewer is not ready to accept its exclusive truth. It is interesting to observe that the author—whose musical judgments seem to be far more independent than the ones which he passes on the fine arts¹—significantly omits speaking about one thing that more than anything else, makes art what it is, namely *form*. One characteristic example: In order to refute "the absolutist conception of art as

¹ It seems inopportune to apply to the "narrower category of major art" (as distinguished from the minor or "impure" arts) the term "fine art"—which means something quite different in customary nomenclature.

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eternal and universal" he quotes (pp. 410 ff.) the results of such "relativistic" psychological experiments as were reviewed by Chandler and Moore. But the fact that many intervals have been regarded agreeable at one time, and disagreeable at another, or that the emotional qualities of the modes have been judged quite differently at different times, cannot minimize the more essential fact that there is a "super-sociological" relationship between that material of music (for this it is) and the form (structure) for which that material has been utilized to produce greater or lesser perfection. Now the author, quoting J. Muller and Vaughan Williams, insists that "the facts of history amply belie the notion that great art is eternal" and that "it is an historical commonplace that artists and works of art, great in their day, are ignored or regarded as mere curiosities by a later day." [True], "it is precisely [such] recrudescence of discarded art that gives credence to the belief in the eternality of art, but what is lost sight of is that the art which is revived is, in no sense but the sheerly physical, the same art, nor is it again admired for the same reasons. As each age rewrites history, so the social mind revalues the past esthetically" (p. 409). Undoubtedly, the latter is true, but it applies mainly to "average" art. Where subject matter is indeed fully transformed into "content" through form, or where tonal relations are fully transformed into "music" through form, and where this transformation is perceived to have attained sublime perfection, the case is quite different. True again: Even Giotto and Rembrandt, Bach and Mozart were neglected during certain shorter periods, and they do not mean anything to the Chinese. But it is—at least potentially—different with *exactly the same audience and public which is able to follow and understand the author's statements*. This audience and public is potentially able, that is, it can be taught by those in the know, to select from the history of art the great masters, that is, those masters whose works are characterized by the perfect (complete) transmutation of *any* subject matter—regardless of its sociological appeal—into imperishable content through form—the one form able to achieve this perfection at that time, yet rising above that time just by being the one perfect embodiment of that subject matter.²

On this level, art does transcend, and always will transcend, group values. The author's sarcastic remark that with the absolutists "*vox populi* becomes *vox dei* by passage of time," contains only half of the truth. If art education, and the teaching of the history of art, mean anything else than mere listening or submitting to, or simply stating, *vox populi*, it has the task of transforming *vox populi*, not into *vox dei*, but into *vox humana*. This is an "absolutist" standpoint only in the sense of a belief in the possibility of preserving and integrating a great heritage, from which, we may trust, Giotto and Rembrandt, Bach and Mozart, will not disappear again.

WOLFGANG STECHOW

Oberlin College

² Neglect of the problem of form by the author has led him to an anemic system of art interpretation similar to that produced by neglect of subject matter and overemphasis on merely formal problems in the books of certain other authors.

The Folk Culture of Yucatan. By ROBERT REDFIELD. Chicago: University of Chicago Press, 1941. Pp. xxiii+416. \$3.50.

Leap-frog is the metaphor Lynd has used to describe the dynamic interactive relationship between fact and theory, and leap-frog is indeed the fascinating game Redfield skillfully directs for us between the ethnological data from Yucatan (with incidental, but crucial supplements from the Guatamala highlands), and the conceptual generalizations of social theorists such as Maine, Tönnies, and Durkheim. Redfield has intricately interwoven what he calls a "report" and a "book"; an accounting of specific facts about a particular people, at a given time, interplays with general observations about the nature of social life.

The Folk Culture is in many respects a cliché-shattering volume. That ethnographic field workers are incapable of conceptual organization of their materials, that the logic of experiment has no place in social science, that the comparative approach has outlived its usefulness, that students of primitive cultures can learn nothing from "armchair" sociological theorists, especially nineteenth-century ones, are but a few of the widespread stereotypes Redfield gently but firmly undermines.

On the purely ethnographic side, the volume may be viewed as the summary presentation of the essential cultural and social facts about four Yucatan communities. Merida, "the one real city of Yucatan," Dzitas, a railroad junction town, Chan Kom, a village of 250 inhabitants and a day's walk from the railroad, and Tusik, a Maya village in the densely forested area of central Quintana Roo (three days' journey by horse from Chan Kom) furnish the basic facts comprising Redfield's report. An excellent over-all view of the geography and agricultural life of the Yucatan peninsula provides the necessary background. Although the materials are not organized in the traditional ethnographic manner, the interested student of culture will have no difficulty in singling out the relevant facts concerning family structure, religious beliefs, magical practices, festivities, life-view, economic organization, class differentiation, racial background, and cultural diffusion in each of the four communities.

But the four areas investigated constitute a series. They represent, in the order presented above, descending degrees of size, mobility, heterogeneity, modernity, and exposure to Western urban influences. This fact makes possible two kinds of investigation. First, we may undertake a rough type of correlational analysis by selecting some feature of these communities as an independent variable and determining what varies concomitantly with it. (Incidentally, Redfield's phrase "what goes with what" is a misleading definition of a correlation problem involving variables.) Secondly, on the not too unwarranted assumption that the communities represent four successive stages of an ongoing historical process, the simultaneous comparison of contemporary societies can also be utilized for tentative and approximate historical reconstruction. Redfield makes his data serve both types of inquiry. Historians and students of acculturation should find particularly useful the suggestive combination of ethnological and documentary historical method to which this work calls attention.

To the sociologist, however, of greater interest are the correlational studies with their emphasis on the nature of society, culture, and social change. Assuming a one-to-one correspondence between isolation and homogeneity—an assumption that in itself merits investigation—Redfield combines these two traits for his independent variable. His dependent variables are cultural organization, secularization, and individualization. His analysis of these concepts follows closely suggestions found in the writings of Professor Park who, curiously enough, is not mentioned in the volume except (if we read aright the initials R. E. P.) in the dedication.

Redfield's general conclusion is that the less isolated and more heterogeneous a society, the more will it be characterized by cultural disorganization, secularization, and individualization; or, phrasing the proposition to refer to a process, as a society is more exposed to outside contacts, communication, and streams of influence, it will become more culturally disorganized, more secular, and more individualistic. This generalization leads the author to the creation, for analytical purposes, of polar social types: folk society and urban society. Redfield acknowledges his indebtedness here to the broad conceptions of Maine, Morgan, Durkheim, and Tönnies. Thus far he is simply confirming and reinforcing, through the Yucatan evidence, propositions of long standing in sociological theory. His original contribution lies more in the recognition of sub-types and compromise or combination types which serve to correct some of the overstatements and exaggerations inhering in the traditional dichotomous schemes. Oddly enough, it is on the basis of Guatemalan rather than Yucatan materials that Redfield is able to posit the isolated, homogeneous, culturally organized type of society which is characterized by secularism and individualism.

The author is not interested merely in establishing correlations; he wishes to determine the natural bonds and interdependent relationships among the characteristics studied. It is at this point, however, that a fundamental weakness of the volume becomes evident: it is non-psychological. Redfield is careful to define and analyze his basic concepts. Particularly significant is his breakdown of cultural disorganization into "variants," "alternatives," "separates" and "incompatibles." When necessary, he goes beyond Yucatan to Guatamala to reveal that money, trade, markets, and formal government, may lead to secularization and individualization within a well-organized culture, although the Yucatan evidence points to an intimate bond between disorganization of culture and secularization. But the whole discussion seems to miss fire. The analysis is much too abstract, too unpsychological. The author fails to make the established relationships meaningful in terms of the concrete behavior of specific individuals undergoing the process in question. We do not meet anyone in the throes of becoming secularized or individualized. We get no insight into the changing mentality of individuals subjected to urbanizing influences. Our acquaintance is with cultural processes and social situations, not with people. Redfield, like the nineteenth-century theorists from whom he derives inspiration, reflects a sociological bias.

One possible exception to this general observation is the discussion of black magic. In presenting the Yucatan data on witchcraft, which offer empirical confirmation of Park's suggestion that urbanization and diabolism are interrelated, Redfield proposes that the more frequent reference to black magic in the city can be explained by the greater sense of insecurity of the individual in the disorganized culture of the urban world. But here, too, it is to the situation that we are introduced, not to insecure persons.

Exemplary is Redfield's spirit of inquiry. Judicious doubt and a healthy skepticism pervade the study. At times it seems as though the author, perplexed in the face of alternative explanations, is begging the reader for assistance. Partisans of particularistic causes will be keenly disappointed in Redfield's failure to create mutually exclusive dichotomies where he can perceive only complementary points of view. One illustration is his insistence that there is no inconsistency between functional analysis and historical explanation.

The University of Chicago Press is to be commended for an attractive book. It is neatly printed, well indexed, and illustrated with remarkable camera portraits taken in Chan Kom and Quintana Roo by Frances Rhoads Morley. Its usefulness is enhanced by a glossary of Spanish and Mayan terms, a bibliography, and supplementary notes. Welcome, too, is Redfield's return to the now almost obsolete practice of inserting chapter abstracts in the table of contents. We regret only the absence, in the volume, of a few simple maps *à la* Horrabin and some phonetic guides, perhaps, to the glossary.

HARRY ALPERT

College of the City of New York

The Social Life of Primitive Man. By SYLVESTER A. SIEBER and FRANZ H. MUELLER. St. Louis: B. Herder Book Co., 1941. Pp. xiii+566. \$3.50.

This book is to be welcomed, presenting as it does one of the few digests in English of the theories of Father Wilhelm Schmidt, hitherto available chiefly in German. Father Schmidt was formerly the director of the Catholic missionary academy in Moedling near Vienna, and of the missionary museum of the Pope, who supported anthropological expeditions suggested by Schmidt, in spite of the fact that a member of the influential Catholic order of the Jesuits was writing against him and that some Catholics and socialists called him a Marxist. Actually his anthropological system is in the tradition of Catholic anthropology as based on the official philosophical system of the Church, Thomism, which represents a synthesis of Plato and Aristotle, later modernized by the Jesuits.

With reference to anthropology the most important Thomist doctrines are as follows: Everyone, regardless of race or color, necessarily belongs to the Catholic church; everyone, even the pagan, has received enough grace of God to be saved and will be saved, providing his way of life is such that he would enter the Catholic church were he able and willing to recognize in it the only true church. Moreover, since such pagans as the Greek and

Arabian philosophers, Aristotle and Averroës, were sufficiently enlightened to recognize parts of the truth though not the whole, many religious customs and rituals of non-Christians can therefore be justified and tolerated. Thus the Thomist position is, as compared with its most important rivals, very optimistic and relativistic. It directly encourages sympathy with and investigation of foreign peoples and is, in that respect, the forerunner of the optimistic-evolutionistic anthropology of the eighteenth-century Enlightenment, as represented, for example, by Condorcet. The latter developed into the anthropological evolutionism predominant during the nineteenth century, according to which evolution was a process of parallel development, occurring more or less automatically and independently in each of the different continents. Thus Divine intervention and human freedom of will were more or less completely eliminated. The anthropological work undertaken by Catholic missionaries could not accept this position, and consequently during the nineteenth century remained in self-contained isolation from the main trend of anthropological thought.

Direct opposition to the doctrine of evolutionism came from the non-Catholic anthropologists, Ankermann and Graebner; they maintained that the appearance of similar and even identical phenomena in separate localities is to be explained not by independent parallel evolution but by migration of human beings and by diffusion of cultural goods. Father Schmidt's system brings together these two distinct anti-evolutionary trends, one Catholic and one non-Catholic. Following Graebner's methods, Father Schmidt distinguishes nine so-called culture circles, or culture entities, which cover all the essential types of human life, and which, he maintains, for the most part date back to prehistoric times and originated in a particular part of the Asiatic continent and from there were diffused by migration over the whole world. These nine culture circles may be defined by combining their prehistoric characteristics with the forms which survive to the present time as ethnological types; they may be listed as follows:

I. *The three primitive culture circles of food gatherers—earlier paleolithic* (in the earlier books of Father Schmidt classified somewhat differently):

1. The exogamous-monogamous type; prelithic culture—African and Asiatic Pygmies; characterized by monotheism, high moral level, especially of family life; bow and arrow used, spears, clubs or shields absent.
2. The exogamous type with sex totems; early paleolithic blade culture—Southeastern Australians, Tasmanians, Fuegians; partial absence of bow and arrow, partial presence of spear and throwing club.
3. The exogamous type with equal rights for both sexes: Premousterian—Ainus, ancient Eskimos, Central Californians, some Algonquins; some monotheism, the beginnings of polyandry.

II. *The three primary culture circles of food producers—later paleolithic* (Father Schmidt considered every one of these as evolved out of the corresponding primitive culture, but our authors have not emphasized this relation):

4. The pastoral nomads; Predmostian—North-Paleo-Asiatic, Ural-Altaic, Indo-European, Semitic and Hamitic groups; large herds, leadership of one man, capacity for ruling large masses of people.
5. The totemistic circle; late paleolithic blade culture—isolated and remote tribes of British India, Africa, Australia, eastern side of the Cordilleras, northwestern coast of

North America; spear throwers using a spear with teeth on one side, labor specialization, handicraftsmanship.

6. The matrilinear circle; Proto-Solutrean—Caribs, Arawacs, Pueblos, Navahos, ancient Mayas, earlier Malays; female divinities, ancestor worship, secret male societies, the hoe.

III. *The three secondary cultures—neolithic* (every one a combination of two primary culture circles indicated by the numbers in brackets):

7. Free matriarchy (4, 6); Azilian and late Campignian—Iroquois, Chibchas, some Dravidians and Melanesians; domesticated fowls and pigs, large pile dwellings.
8. Mother-right totemism (5, 6); high Solutrean—Peru, Egypt, India; origin of money.
9. Free patriarchy (4, 6); Capsian, Tardenoisian—later Chinese and Assyrians; foundation of the state.

Leaving to one side the question of the correctness of the culture circle theory in itself, the following six special criticisms have to be put forward (indicating again by numbers in parenthesis the culture circle in question): First, the so-called primitive cultures (1-3) were not monotheistic, for, according to our authors themselves, the Fuegians have a plurality of minor spirits, the "supreme being" of the Semang has a wife, and many Australian phenomena, interpreted here as monotheistic, are actually "All-father" figures, alongside which divinities of inferior power co-exist. Second, the Pygmies (1) do not form a unit, the members of which have the same main cultural goods in common, for only African Pygmies have the round bow, initiation rites, and totemism. Third, the Pygmy culture (1) is not as old and as simple as supposed, for protolithic Pygmy skeletons are absent, and the bow of the Pygmies, while indeed very primitive, cannot be proved to be older than the clubs and spears of the Tasmanians and the Australian boomerangs and throwing spears. Fourth, the Tasmanians and southeastern Australians on the one hand and Fuegians on the other differ too widely to be grouped as a cultural unit (2). Fifth, the pastoral nomad culture circle did not originate in the Pygmy culture circle, as Schmidt maintains, since the latter is not as old as he supposes and has no point of contact with the localities where animal husbandry originated. Sixth, animal husbandry is not primarily an economic activity; Eduard Hahn has shown, in spite of some exaggerated statements, that domestication of animals is primarily a magico-religious act; Robert Lowie has shown that the mentality and behavior of the earliest animal breeders is, in the main, not governed by economic factors; and the author of this review, partly in criticism of Hahn and partly with reference to Graebner, has shown that while it is not true that every totemistic culture changes to animal husbandry (Northwestern America, Brazil near the Cordilleras, and Australia would refute such a hypothesis), it is true that most animal husbandry cultures contain vestigial residues of the totemistic culture out of which they developed. On these grounds, even if the culture circle theory as a whole were true, the interrelations and line of development of the different cultural circles would have to be conceived differently from the way in which Father Schmidt and our authors conceive it.

The theory as a whole, however, is open to the following fatal objections: If, as our authors maintain, the crossing of mother-right (6) and totemism

(5) occurred very frequently and is responsible for the similarity existing between cultures of the same type (8) in various countries, why cannot other instances of similarity be explained in the same way, i.e., not by reference to diffusion and migration but as due to the presence of the same causal factors in each case? For example, the similarities of the Andes civilizations on the one hand, and of the old Asiatic empires on the other, especially with reference to the domestication of animals (they are both classified by our authors as belonging to the so-called "free patriarchy" (9), the similarities between the cipher system of the Mayas and of the Old World, the similarities between the matrilinear horticultural societies of southwestern North America and of some parts of Asia—all these and many analogous phenomena cannot be explained as due to overland migration, since there is no evidence for such. Nor does reference to the Polynesians, whose role is emphasized by Schmidt, explain these since the migration of the Polynesians is relatively recent and later than the development of the Maya and pre-Inca civilizations; in any case the Polynesians had no domesticated animals. Thus the ethnological phenomena of the American continent show that similarities between different cultures may be due to the presence of similar causal factors, one of which may be the geographical situation, to which insufficient attention is paid in this book.

This criticism does not, of course, exclude the possibility in other cases of migration of human beings and diffusion of cultural goods, in Schmidt's sense of these terms. In fact, the following cultures seem to have originated in Asia, where their formation is conditioned by the geographical factor, and to have subsequently been diffused by migration: first, the paleolithic blade culture (2) from central Eastern Asia to Tasmania but not to Tierra del Fuego; second, the totemistic culture (5) from Central Eastern Asia to many countries including the Andes; third, the paleolithic fist-ax culture—not mentioned in this book, but well elaborated by Menghin, another follower of Father Schmidt—from middle southern Asia to southeastern Australia and other places; fourth, the early matrilinear horticultural culture (6) migrated to many continents. But these are all; all other phenomena explained in this book as the result of migration must be explained as the result of parallel development. This is particularly clear in the cases of similarities between America and the Old World which were mentioned above.

The fact that this book is at once so enlightening and so prone to exaggeration and one-sidedness finds its explanation in the factors influencing the formation of Schmidt's system, as outlined at the beginning of this review. A method developed by Ankermann and Graebner, useful and valuable as a heuristic principle, became in Schmidt's hands a law of ontological character; the "culture circles," terms not without value as designations for constellations of traits, became entities in the metaphysical sense and were evaluated (e.g., the Pygmy culture) in terms of a non-scientific, and therefore scientifically inadmissible, absolute value system, based on metaphysical premises. Schmidt and his followers have based their doctrines not only on the results of special investigations made by

themselves and by other Catholic missionaries, which are often highly useful in themselves, but also on the doctrines of scholastic or at least Platonic metaphysics; this is most evident in the collection of studies offered to Schmidt by his followers on the occasion of his sixtieth birthday, and in the chief work of his follower Menghin. While this book carries on the valuable work of Kroeber, Linton, and Lowie, in counteracting the older one-sided pure evolutionism, it is nevertheless vitiated by this dangerous metaphysical tendency.

PAUL HONIGSHEIM

Michigan State College

Catholic Social Theory. By WILHELM SCHWER, S.T.D. Translated by Bartholomew Landheer. Preface by Franz Mueller. St. Louis: B. Herder Book Co., 1940. Pp. 360. \$2.75.

This book is of interest to sociologists for at least three reasons. In the first place, it provides a very clear exposition of the main elements of Catholic social teachings, as they have been developed from the writings of the earliest church fathers up through the encyclicals of Leo XIII and Pius XI. Chief attention is given to the doctrines regarding the family, the state, natural law, and the doctrine of the relation of the individual to society. These are not offered as sociological theories. Schwer is entirely explicit about the non-scientific premises upon which they are built. The student of the sociology of religion will find this aspect of the book exceedingly useful, not as a source of sociological concepts, but as a guide to the understanding of Catholic social theory, an unusually consistent body of doctrine which Schwer discusses from the historical or developmental point of view.

A second source of interest in the book concerns the relation between Catholic theory and scientific sociology. In the discussion, Schwer seeks to "embody the results of sociological research." This attempt is made possible by the concept of relative natural law which holds that "... the activity of the divine Creator does not deal regularly, immediately, or constantly with the created world. The organization of the world has been left to secondary causes. Thus social life is a world of natural forces, laws, and forms in which social philosophy as well as sociology can move freely" (p. 67). It is by means of this concept that Catholic doctrine attempts to encompass every human development, including science. It is the most elaborate and effective system of intellectual hedging ever devised. Catholic teachings never make a *direct* challenge to what is; they find a place for it within Catholicism, and then attempt to bring about whatever modifications are necessary in terms of the ends in view. When sociology appeared, this procedure was followed; sociology has been treated, in effect, as part of the "relative natural law." Catholicism refuses to quarrel with any movement on any grounds other than first premises: and then first premises are held to be beyond and above science and human challenge. By never making an absolute decision, Catholicism preserves its absolutes.

Those who do not share the first premises, however, do not find the solu-

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tion so satisfactory, for it sets up boundaries to thought. Schwer recognizes this when he says: "... a Christian philosopher is bound by limits which his philosophical thinking cannot pass. He must accept certain final truths as already decided" (p. 66). The "Christian scientist" is similarly bound, he cannot "move freely"; and, in addition, his attention area is limited (although, on the other hand, he is sensitized to certain data).

In the third place, Schwer has several fine passages on the history of social thought, particularly its Christian sources. Chapter Two is especially good in this regard.

In general, the title of the book, *Catholic Social Theory*, reveals where its value rests. It is not, as Schwer recognizes and as Mueller notes in the Preface, a treatise on sociology and should not be taken for one.

J. MILTON YINGER

Ohio Wesleyan University

Man of Spain: Francis Suarez. By JOSEPH H. FICHTER, S.J. New York: Macmillan, 1940. Pp. viii+349. \$2.50.

Francis Suarez (1548-1617), Spanish Jesuit theologian and writer on the philosophy of law and government, was an outstanding representative—perhaps the most outstanding representative—of a brilliant period in the intellectual history of Spain. He was a younger contemporary of the better-known French writer, Jean Bodin (1530-1596), and of his countryman Juan de Mariana (1536-1623), who is classified with the sixteenth century anti-monarchists, and to whose *De Rege et Regis Institutione* (1598) certain works of Suarez published in 1612 and 1613 bear some resemblance. Suarez shares with his anti-monarchist predecessors and with a long line of scholastic writers the credit of having laid down the doctrine of government by consent long before it was enunciated in the American Declaration of Independence. His *Disputationes Metaphysicae* (1597) has been described as "the last great study of scholastic philosophy, [which] helped to prepare the way for neo-scholasticism."

For a summary of Suarez' contributions to social thought, the ordinary non-Catholic student will find Dunning's account in *Political Theories: From Luther to Montesquieu*, and Wright's article on Suarez in *Encyclopedia of the Social Sciences* more useful than the present volume, which is an interesting, readable, biography of the great Jesuit scholar, sympathetically but candidly written by a Jesuit scholar of our day.

FLOYD N. HOUSE

University of Virginia

La Verdad, La Ciencia y La Filosofia; (Tratado de Eurística Razonada). By FRANCISCO JAVIER A. BELGODERE. Mexico: Francisco Marruenda, Librería "Pharos," 1939. Pp. 262.

Acting on the assumption that where there is disagreement, there is also ignorance, the author of this *Treatise of Rational Heuristics* seeks to prove (a) the existence of Absolute Truth, and (b) that this Truth is necessarily and eternally beyond the ken of man.

In his nine chapters, Señor Belgodere considers everything from philosophy and physics to history and ethics, attempting to demonstrate that there is no real truth in any of these fields because there are differences of opinion in all of them.

He condemns both nominalists and realists with equal vigor, and holds up the unexperienced and unknowable (and hence merely verbal) concept of Absolute Truth as a goal which man must seek, though all his seeking is foredoomed to failure. The tone of the whole book is probably best exemplified in the following quotation: "Only to God belongs truth, because He is a Perfect Being, and its antithesis, error, is the product of human imperfection. . . . God in His wisdom preferred to make us thus, knowing that pride is current coin and that if, being ignorant of all, we yet give ourselves airs of self-sufficiency—if we knew all, we would be insupportable."

It is easy to see from the above why it is impossible to discuss this work from the scientific standpoint. The author has not chosen a scientific question and, naturally enough, has not dealt with it scientifically. The work is of negligible value to the sociologist, and the total absence of footnotes and page references precludes its use even as a source-book.

J. DAVID A. ELMALEH

University of Wisconsin

Social and Cultural Dynamics. Volume Four: *Basic Problems, Principles, and Methods*. By Pitirim A. Sorokin. New York: American Book Company, 1941. Pp. xv+804. \$6.00.

Happy Mr. Sorokin! He knows the secret of history. "While the sweet theories of the critics are entirely washed out by the inexorable course of events, my diagnosis and the theory underlying it need no correction. History, so far, has been proceeding along the schedule of *Dynamics*" (p. v). His supersystems of culture "seem to be, so far, the vastest supersystems among all the real systems of culture hitherto discovered" (p. 139). His propositions are free from all the shortcomings of the current theories (p. 577). He has discovered the true interrelations of "an enormous number of processes" (*ibid.*). He has answered all the important questions (p. 773). Thrice happy Mr. Sorokin! "In a profound peace of mind, we approach the end of the long and arduous pilgrimage of our analysis of the structure and change of culture. All that remains now is to cast, from the outlook attained, the last glance at the tragic scenery of the twilight of the Sensate phase of our culture. Let us do it with all the compassion of a participant in the tragedy and all the unshatterable hope of him who sees beyond the near horizon."

We admire his labors and we would not disturb his peace, even were that possible. We are impressed with his vast Spenglerian antitheses, his more than Spenglerian erudition, and his utterly un-Spenglerian massing of statistics. We envy his short way with critics and his secure Athanasian stand. We genuinely applaud his vindication of the integrity of knowledge, his vehement polemic against positivists and pragmatists, neo-realists and mechanists. If we still cavil at the *Dynamics*, it may be only because the

inner light that guides the author has not been vouchsafed to such critics as the present reviewer.

There are, it is true, minor blemishes, such as a curious looseness of language and a habit of using Latin words in a way that flouts the Latin grammar. We pass these by, we are concerned to look instead at the main theses of a work dedicated to the "cardinal problems of sociocultural change." It falls into three parts. Part One deals with the properties of the sociocultural system. There are systems of causal relationships and there are systems of meanings. Any assortment of things not integrated by causal or by meaningful relationships is not a system but a congeries. All empirical sociocultural systems are "simultaneously meaningful and causal." This is their peculiar property. Every such system is a self-directing unity, subject to its own principle of immanent change. Each has its specific structure, its own life span and its own destiny. Beyond the particular systems we must seek greater supersystems, and here again Professor Sorokin offers us his final trilogy of "ideational," "idealistic" and "sensate" types and phases.

The initial exposition holds high promise, the promise of an attempt to grapple with the sociocultural order as "meaningful-causal" reality, combating those who give us too simple solutions by neglecting one or the other aspect of the complex totality. How the meaningful-valuational schemes of social life are dependent on, responsive to, and incarnated in the physico-organic world is the crucial issue. But our author in the main confines himself to describing different forms of sociocultural unity, taking the position, developed in Part Three, that their major changes are chiefly due to the internal functioning of the systems themselves and not to external or environmental conditions. He tells us this answer is sound, sufficient, precise, and definite. The change of a system is "neither a mystery nor a problem difficult to explain" (p. 595). Such statements, like so many made by our author, are far too complacent and far too sweeping. It is not enough, for example, to regard a social organization as having its source of change within itself. The system A, we are told, is "destined to have a life career B," and cannot have another for which it lacks potentiality. A criminal gang does not become a "society of real saints," nor does a state become a night club (p. 604). But who can reckon the potentialities of a state—or even of a criminal gang? They are not inherent in the organization, the character of which can undergo almost any transformation according to the changing demands of its members, the external compulsions put upon them, and the environmental conditions to which they are subject. The future of a social organization is not inherent in the social organization as such, in the sense in which the future of an organism is inherent in the organism as such. The Spenglerian fallacy dogs Professor Sorokin.

There are other difficulties in the causal analysis but they cannot be dealt with in the space of a review. It is in any event hard to convey a total picture of a work that voluminously combines pregnant observations and well-documented evidences with loose reasoning, dubious generalizations, prophetic utterances, and uncontrolled excursions to the Absolute.

Part Two deals largely with the periodicities and rhythms of sociocultural change. A considerable portion of it consists in an attack on what the author calls "dichotomic theories." The present reviewer happens to be included among the "dichotomists," along with "F. Bacon, K. Marx, A. Coste, M. Tugan-Baranovsky, L. Weber, T. Veblen, A. Weber, W. Ogburn, and others." Our common error is that "without any explicit distinction between sociocultural systems and congeries" we "divide the total culture of any society into two different classes, and claim that all the phenomena within each class are interdependent and change along the same pattern, while the patterns of the change of each class are fundamentally different" (p. 155). The author's own position is stated to be that "in systems"—as distinct from congeries—"all the compartments change together in any important movement" (p. 197). The concept of congeries, useful in itself, here serves the author too well. To call a congeries any item or configuration of items that does not change in "togetherness" with the rest of the system is merely to acknowledge in another way the very distinction the author is trying to demolish. The whole argument is rather bewildering. Thus Professor Sorokin pays tribute to Arnold J. Toynbee because he "shows convincingly that, for instance, the technological change in each of these civilizations has proceeded quite independently from the change of the rest of the civilization" (p. 150n.). This statement of Toynbee's goes much further than the present reviewer has ever gone in stating the "dichotomic" distinction of technology and culture. Our bewilderment reached its height when we came to the following passage: "There is no uniformity of technology-economics with the rest of the culture . . . Therefore, for this reason also, the claim of the dichotomic theories is untenable" (p. 317). Incidentally, the reviewer finds that he—name consistently mis-spelled—is credited many times over with positions that he has always repudiated and criticized (for example, on pp. 172, 283, 305). The criticism of writers like Max Weber, Alfred Weber, Thorstein Veblen, Alfred Marshall, and others, is on a similar level.

Having furnished us with the "how" of change Professor Sorokin turns in Part Three to the "why." Here he offers the "principle of immanent change" on which we have already commented. He adds a "principle of limited possibilities of change." These principles corroborate his thesis of the super-rhythm, the great swing from the "ideational" to the "sensate" and from the "sensate" to the "ideational." He assures us that the mere counting of sequences is but additional confirmation of a conclusion arrived at by "logico-meaningful, plus causal, analysis" (p. 432n.). This analysis tells him that we are at the momentous turn back to "ideationalism," through "crisis," "catharsis," "charisma," and "resurrection." The prophetic disclosure does not dazzle us so much as it does our author. We note that in the Western world the last previous triumph of "ideationalism" was the period between 600 A.D. and 1100 A.D. Then the "truth" of faith prevailed; now we hear the death-rattle of sensate culture. Among the many doubts that assail us is one whether the society of that "ideational" age was any less concerned with the things of the flesh than this twentieth

century. We are also simple enough to think of that age as being no less dark than "ideational." We cannot share the apocalyptic happiness of our author at the prospect of a return to a phase of the great super-rhythm that in the past was accompanied by the squalor and superstition of a peasant society.

R. M. MACIVER

Columbia University

The Crisis of Our Age. By PITIRIM A. SOROKIN. New York: E. P. Dutton & Co., 1941. Pp. 338. \$3.50.

This book is a condensation of *Social and Cultural Dynamics*. Directly, it is a revision of the Lowell Lectures (1941) on *The Twilight of Sensate Culture* and contains portions of the addresses to the Duke Centennial, the Georgetown Sesquicentennial (1939) and the American Catholic Sociological Society (1940). The latter address was also delivered before the American Sociological Society the next day, but this is not mentioned in the preface.

The volume contains nothing new to readers of *Dynamics* unless it be the somewhat more impassioned restatement of the Sensate-Ideational polarity (and the ill-defined Idealistic [Ideational] middle term [Golden Mean?] to which Sorokin seems personally committed) with more emphasis on the over-ripe, super-ripe (Sorokinian euphemism for "rotten"?) horrors of our decadent, disintegrating, trivial, and sensual Sensate culture. The style is super-ripe with emotionally charged adjectives, figures of speech, *obiter dicta* (and *ipse dixits*), doom-and-sooth sayings, and exaggerated special pleadings. By the last, I mean that our "sensate" culture (since 1500) is presented in the worst possible light; all its faults are shoutingly displayed and what Sorokin admits are its chief virtues (science and technology) are twisted about to account for its alleged damnation. On the other hand, the "ideational" culture of 500-1200 is presented as a Golden Age to which we must return if we are to be saved: the filth, cruelty, ignorance, sensuality, disease, starvation, exploitation, persecution, revolution, war, bloody violence, and denial of the dignity of man throughout these centuries are all omitted. The fat gormandizer Aquinas is presented as the Idealistic (Ideational) model of mentality to save us from our day of wrath and wretchedness. It is stated (p. 146) that "... a few drops of poison are sufficient to make the water ... poisonous" when he is showing how the lesser amount of relativism corrupts the slightly greater absolutism in our culture. Similarly, perhaps, he would account for the decadence and bestiality of the ideational period in question as being due to the poisonous seeds of sensate culture germinating noxious weeds (Sorokin's style, not mine) in the otherwise glorious garden of ideational worship of the supersensory Absolute.

Before the Ideational-Sensate polarity can be proved or refuted, the kind of data Sorokin uses must be compiled and classified by a number of independent investigators using the same criteria (there's the rub!). Then the data should be used to test alternative hypotheses. Data collected and used somewhat as Sorokin has done have been used to support quite different

hypotheses with about the same degree of success or plausibility. However, so far as I know, no one has done it on such a large scale as Sorokin using what superficially appears to be empirical and even quantitative methods. Though empirical science is damned by Sorokin as pseudo-science, it is by the use of these methods that he attempts to prove his thesis. Sorokin's "quantitative methods" are highly suspect, to say the least. His procedure is much like trying to prove that mince pie is better than apple by assigning "quantitative" values to the verbal reports of pie-tasters.

The *Dynamics* is one of the best examples of Supersensate Colossalism in modern academic enterprise. It is an Empire State Building of scholarship, and *The Crisis of Our Age* is a repetitious Ossa piled on top of this colossal verbal Pelion. Perhaps it thus proves that colossalism is truly a symptom of sensate decay, but one could equally well claim that colossalism is also a symptom of ideational decay and prove it by the wordy works of Aquinas and Albertus and the monstrous medieval cathedrals.

There is some juggling of terms amounting almost to the fallacy of transposition. In dealing with "intuition" (pp. 105-112), the "hunches" of Poincaré, Newton, Archimedes, etc., are treated as equivalent to the "intuition" of Paul, Augustine, and all receivers of "revelations" from the Absolute. Mysticism, supersensory experience, is a necessary aspect of all true knowledge, though the senses and the reason are admittedly also necessary for true cognition, just as Aquinas tells us. The real problem is the logic underlying the whole Sensate-Idealistic-Ideational schema. Do these terms mean anything sufficiently definable so that men other than Sorokin can use them? Sorokin usually uses sensate as epithet and ideational as praise. Can such a procedure serve any useful scientific purpose? He constantly asserts that these "mentalities" are always mixed in varying degrees in all cultures and usually in individual men. Is Sorokin to be the sole authority as to what is sensate and ideational in each man and each culture and each aspect of each culture? What does he mean by decay and degeneration and rottenness and poison? Is it merely what he does not like? It seems so in both the *Dynamics* and *The Crisis of Our Age*.

This volume then is neither science nor philosophy. It is infused with high moral purpose; it sounds like the anguished cry of a defeated idealist to whom the future looks very black and who therefore lashes out against the world he does not like, and calls upon sinners to return to the comforting womb of the Absolute. Personally, I think this way is closed; Aquinas is as dead as Zeus. Certainly, most scientists believe as strongly as Sorokin that man's welfare is the prime value and that there are terrible ills in our culture but I, for one, attribute them in no small degree to the remnants of that same supersensory mystical Absolute to which he would have us return. We need to get completely rid of that particular denial of the dignity of man; man must be master of his fate—if his fate can be mastered. We need more science, not less, and it must be natural science, not the pseudo-science of the ideational middle ages.

The way ahead is dark indeed but it is not so dark and dank as the medieval pit from which we have been digged. These dark days may be followed

by a brighter dawn—or by oblivion. In any case, we cannot now return to Aquinas even if we would. Such a solution for the world crisis is impossible. We need prophets to lead us, but they must lead us forward out of the Wilderness, not back into the Egyptian Night.

READ BAIN

Miami University

Biography of the Gods. By A. EUSTACE HAYDON. New York: The Macmillan Co., 1940. Pp. ix+352. \$2.50.

"The biography of a god can be written only as a phase of the life process of a people" (p. 16). With wide learning and literary skill the author develops this theme, ignoring dead gods such as those of Greece and Rome, and of the valleys of the Nile and Euphrates, and confining himself to the living gods of Iran, India, China, Japan, Judaism, Christianity, and Moslemism. This important book is singularly free from theological or metaphysical assumptions. The gods are creatures of man's emotional needs and die through disuse and man's increasing self-sufficiency. The trend of history points to a sort of pragmatic atheism, born of disillusionment induced by world-wide mingling of cultures and a deeper scientific insight which has "reduced the eternal self-existent, personal God, enthroned in a supernatural, spiritual realm, to a symbol socially created, shaped by ages of cultural history embodying man's faith that the universe will guarantee the ultimate victory of human ideals" (p. 277). The concluding chapter, "The Twilight of the Gods," ends with these words: "What the gods have been expected to do, and have failed to do through the ages, man must find the courage and intelligence to do for himself. More needful than faith in God is faith that man can give love, justice, peace, and all his beloved moral values embodiment in human relations. Denial of this faith is the only real atheism." The book, the product of years of study, is an unintentional but singularly apposite commentary upon the cultural cataclysm that threatens the modern world.

JOHN M. MECKLIN

Dartmouth College

New Social Horizons: Design for a Personality-Centered Culture. By SEBA ELDRIDGE. New York: D. Appleton-Century Co., 1941. Pp. ix+444. \$3.50.

In these parlous times and when the minds of thoughtful men are searching for clues by which to chart the possible course of future events, it is a pleasure to read a book that inspires confidence to believe in the ability of men to work out a new and better social order for themselves and for posterity. Such a book is the one here under review.

Eldridge has written a straight-from-the-shoulder critical appraisal of contemporary civilization. He has not spared his punches, but at the same time he has maintained a calm reasonableness and an attempt at detachment, which commend the book as that of a sensitive scholar, who is at once intensely concerned about the defects to be found in our present-day institutions and politico-economic arrangements, and yet is optimistic enough to propose a "new social order based upon cooperative groups built

up by the mutual and political interests with centralized government control." This hypothetical order, inductively arrived at, is the subject matter of the latter part of the book.

As in other writings by the same author, the reader will observe an interweaving of the materials of economics, political science, philosophy, and sociology. He will also be impressed by the fact that this is a peculiarly personal document. Throughout the book—from the first page to the last—are to be found expressions of strong belief, amounting to conviction, of an inner faith, of a desire for a kind of reformation that would lead to a lessening of emphasis upon competitive, pecuniary, and acquisitive values, what he calls "thing civilization," and to the establishment of social organization for a "personality-centered culture." This is not to suggest that the book is simply an expression of one man's philosophy; at the same time, "it is not," to quote the author, "pure science as currently understood."

The book is written for the general reader as well as for the student of social science. The author has appended some suggestive "Problems and Projects" for the use of students in college classes and in study groups. There is no bibliography except what is afforded in footnotes. One feature of the book that will interest the academic person is Eldridge's "Design for a New Curriculum" in the social sciences (pp. 362-368).

W. E. GETTYS

The University of Texas

Problemas de Uma Sociologia Do Peneiramento. By EMILIO WILLEMS. São Paulo, Brasil: Department of Culture, 1941. Pp. 63.

This brief monograph first appeared as an article in the *Revista Do Arquivo*, a publication of the Department of Culture of the state of São Paulo, and is the work of a writer who deserves to be heard. Willems is co-editor of the magazine *Sociologia*, a member of the faculty of the University of São Paulo, and on the staff of the recently organized department of anthropology and sociology in the Escola Livre de Sociologia e Política de São Paulo, of which department, interestingly enough, Donald Pierson, an American sociologist, is chairman.

The above, together with the fact that he is the author of nine other significant sociological treatises on various aspects of Brazilian life, gives this monograph more than passing significance for the student of Brazilian sociology.

As the title indicates, the work is a study of some of the problems of "peneiramento," which Willems translates as meaning "sieving" in English or "*Siebung*" in German. Obviously, a less awkward English equivalent would be "sifting," and a still better translation would be "selection." However, this I am prevented from offering since the author deliberately excludes it in his introductory statement.

The article opens with a discussion of the unsatisfactory character of the term "selection." It is held that the word has been used to designate such a wide range of biological and social phenomena that it has lost the exactness

and preciseness demanded in a scientific universe of discourse. Accordingly, Willems proposes to substitute the Portuguese "peneiramento" for "seleção social." American readers can overlook this distinction and read the work as a contribution to the study of the process of selection.

The discussion is initiated by suggesting that social stratification and division of labor are the two principal factors in determining the nature of the process of selection, and that the results may be investigated from five points of view:

1. From the point of view of the nature of the objects undergoing the process, it is possible to distinguish two types of selection: (1) social and (2) cultural.
2. In terms of the form of the processes, selection may be (1) organized or institutional, and (2) unorganized or "diffused," to use Willems' word.
3. By taking into account the social relations of the persons involved in the processes of selection, the results may be classified as (1) intra-group, and (2) inter-group.
4. On the basis of numbers, selection may be described as (1) individual or (2) collective.
5. Finally, when viewed in relation to the movement which invariably accompanies selection, the data may be classified as dealing with (1) selection involving movement in social space, and (2) selection involving movement in geographic space.

Of course, Willems recognizes that these categories are not mutually exclusive; he offers them simply as a classificatory device.

Having thus blocked out the problem, the following topics are then discussed: (1) cultural selection, (2) selection as an aspect of the process of acculturation, and (3) social selection. The article concludes with the presentation of the results of a study of the "Frustration of the Process of Selection." Based on replies received from students in four normal schools in the state of São Paulo, the data are presented in tabular form and interpreted to mean that the great majority of the respondents were quite ready to frustrate the legal means of selection in securing jobs by employing other than the officially approved techniques, and that such frustrations were approved by the mores of the culture. Translated into the lingo of politics, this means that the students relied more on "pull" than on civil service examinations and ratings.

It is evident that there is nothing new or startling in all this. The work is chiefly interesting for what it suggests with reference to the development of sociology in Brazil. Sound in its theoretical orientation, it is another contribution to the mounting pile of evidence in support of the fallacy of the widespread belief among American sociologists that sociology is quite retarded in Latin America. It would appear that the persistence of such a belief is only a function of our ignorance, which, in turn, is due to the inability of American scholars to use Spanish and Portuguese as research tools. No one familiar with the work of such men as Willems, Gilberto Freyre, Pedro Calmon, Carlos D. Carvalho, Mario Lins, Arturo Ramos, and Pinto Ferreira in Brazil—not to mention comparable leaders in almost every country from Mexico to Argentina—could possibly think of Latin American sociology as backward. Widely-known it may not be; undeveloped it is not! The fact of Willems' evident orientation in American sociology and his frequent citations of well-known and reputable American sources does credit to him, but

reflects quite unfavorably on the corresponding ignorance of his North American colleagues.

REX D. HOPPER

University of Texas

Race: Science and Politics. By RUTH BENEDICT. New York: Modern Age Books, 1940. Pp. vi+274. \$2.50.

This is a clear exposition by a noted anthropologist of the distinction between race and racism. One is science; the other is propaganda.

The author accepts the concept of race as one that deals with "heredity and traits transmitted by heredity which characterize all the members of a related group." She first dispels the common error of confusing race and language. She then eradicates another common error among laymen—the belief that culture is a function of race.

In the author's attack on the physical anthropologists she reveals the bias of the Columbia University school of anthropology. She points out that many of the physical characteristics, such as narrow-headedness, are universally found to a degree in all ethnic groups and are not sufficiently predominant in any race to be typical of it. It is the reviewer's belief that modern physical anthropologists hold that a peculiar or special set of physical characteristics is typical of all ethnic groups whether the groups be large or small, and that these characteristics and the ethnic groups themselves are not static but vary and are dynamic due to intermarriage or by some influence of the environment on the genes or chromosomes.

The author's analysis of the value of the mingling of various ethnic groups is excellent. She shows that the alleged inferiority of the half-caste is likely to be due to social ostracism rather than to defective biologic inheritance. The best chapter is the one entitled "Who is superior?" She refutes some of the repeated arguments for superiority based on single traits just because they favor the White race.

It is when the author denies the existence of psychological hereditary racial differences that the reviewer takes serious exception to the author's views. It is the reviewer's belief that the quarrel between the opponents of the opposite schools of thought on the question of racial intellectual differences is due to the fact that the term intelligence is variously defined and our apparatus and techniques for measuring that which we choose to call intelligence are inadequate and faulty. The author concludes this chapter with a disavowal of the contention made by racists that national or racial superiority is due to mere germplasm or "blood," which she illustrates well in the rise and fall of Athens, Sparta, the Italian cities, and Spain.

The author's conclusions are well presented in her own language:

All scientific knowledge of race contradicts the idea that human progress has been the work of one race alone or can safely be entrusted to a program of racial hygiene in the future. No great civilization has been the work of a pure race, and neither history, nor psychology, biology, or anthropology can render decisions about the future destiny of any present human breed. Racism has been a travesty of scientific knowledge and has served consistently as special pleading for the supremacy of any group, class or nation, to which the pleader himself belonged and in whose place in the sun he desired to believe.

The reviewer strongly recommends *Race: Science and Politics* to the public with the assurance that the layman as well as anthropologist, sociologist, and psychologist will profit by it.

J. H. LANDMAN

The College of the City of New York

Race, Sex, and Environment. A Study of Mineral Deficiency in Human Evolution. By J. R. DE LA H. MARETT. New York: Chemical Publishing Company, 1940. Pp. 342. \$8.50.

No sociologist could, or would, have written this book; few, if any, can fully understand all of it; and none will accept all its conclusions, or even a major part of them. It exhibits the speculative mind at its best, and at its worst. The main body of this ingenious effort is an attempt to account for the evolution of man in his early and late forms as due to the abundance or scarcity of iodine, calcium, phosphorus and other essential chemical elements. It is Darwin's *Descent of Man* brought up to date under the thesis that "Present heredity has been moulded by past habitats." One must read this book in order to have an adequate appreciation of the encyclopedic learning and the vast capacity for rationalization that is here devoted to the solution of problems which in their very nature are largely insoluble, even with much more knowledge than we now possess.

Some of the basic considerations are clear enough. Every one will admit that the essential chemical elements would be found in different amounts in different habitats, both now and in remote times. All will admit that plant and animal forms are under the necessity of adapting themselves, their forms and their physiology, to their life conditions. Whether, however, variations in the amounts of certain chemicals would result in erect stature, larger brain, the foetalization and feminization of man, differentiation into different types (especially two wholly hypothetical sub-stems of the original *homo*), prominent chin and dentition, lack of body hair, and survival, or creation, of pubic hair, Kretschmer body types, dominant (plainsmen) and submissive (peasant) populations, and even the decline, if not the rise, of civilizations—all these are largely hypothetical and here undemonstrated. Since the facts to support so large a superstructure are largely wanting, the author resorts to heroic hypotheses. Even if the facts are contradictory, the author can find diverse reasons for their reconciliation. The work abounds in such words as "assuming," "if," "may," "might," "possibly" and "probably," and in such phrases as "though there is no direct proof," "this is pure speculation," "we are still dwelling in the realms of almost pure imagination," etc. The author is thus extremely untrammelled, arbitrary, and inventive in making assumptions, but he is entirely undogmatic as to the validity of his conclusions. He says, "My enquiries have led to the asking of far more questions than have been answered."

The obvious criticism of such a work is that scientific facts are too few to control the speculations. One may well believe that a small handful of pertinent facts would result in numerous tragedies among these spawning hypotheses. In several cases the same conditions produce diametrically

opposite results. "Acromegaly and gigantism, no less than cretinism and dwarfism, might thus possibly be due to iodine shortage" (pp. 35-36). Man lost his hair in a mountainous iodine-deficient area; but the same conditions produced the long coarse hair of the Mongoloids and the Yak. This does not disturb our author, since coarse hair is presumed to be more economical of iodine than fine hair (pp. 160-161). He passes over the fact that short hair would be more economical than long, while the really economical state would be no hair at all! In many passages far-reaching results follow upon persistent chemical shortages. Thus iodine shortage in that same central Asian plateau resulted in very low fertility; and this in turn produced polyandry. What produced polyandry in the Pacific Islands is not touched upon. As a rule no current scientific evidence for the assumptions made is cited. Where evidence is cited, it sometimes seems remote from the problem at issue, as in the repeated citation of Goldschmidt's experimental intersexuality produced in the gypsy moth (pp. 7, 20, 43, 193, 197). Sometimes it is questionable, as in the theory that race crossing results in a preponderance of female births (p. 241). He works the theory of atavism very hard (see especially p. 127). Throughout he either implies the inheritance of acquired characters, or he assumes that a bodily adaptation will be accompanied by the appropriate gene modification to make it hereditary. Throughout also there is an obvious lack of current appreciation of the role of culture in the further evolution of culture.

However, the author has presented the anthropologists enough theories to keep them busy for a generation. In the end, some of them seem certain to prove correct.

FRANK H. HANKINS

Smith College

The Psychology of Social Movements. By HADLEY CANTRIL. New York: John Wiley and Sons, Inc, 1941. Pp. xv+274. \$2.75.

The present-day severe crisis of our culture has resulted in a host of collective efforts to change established folkways and institutions. In consequence, these concerted actions, called social movements, have become "conspicuous" phenomena, and since many things about them puzzle us they are being studied by a growing number of social scientists.

That the exploration of the neglected and truly *social* field of movements is timely and practical is clearly shown by Cantril's study on the psychology of social movements. Cantril offers four excellent case studies of social movements: the Kingdom of Father Divine, the Oxford Group, the Townsend Plan, and the Nazi Party. His main interests are the psychological consequences for the individuals who support a movement, of the conditions and circumstances which account for its origin and growth. This socio-psychological approach is a necessary supplement to the broader sociological approach which searches for general factors determining social movements.

In the first part of his book Cantril sets down the framework in terms of which he analyzes the motivation of the adherents of social movements.

The key concepts of this framework are "enhancement of self-regard," the "desire for meaning," particularly evident in critical situations when individuals are confronted by a chaotic environment which they want to interpret. The second part consists of detailed case studies of a lynching mob and the four contemporary social movements mentioned before. In these studies Cantril convincingly shows the utility of his framework and theoretical assumptions, for analysis conveys a genuine *understanding* of the nature and growth of these cases of collective behavior.

Cantril's interpretation is functional. He shows what problems individuals are experiencing, and how a movement furnishes an adequate solution to these problems. In each case he carefully considers the social setting which accounts for the prevalence of like problem-experiences, and for the particular social group affected by them. He demonstrates his conclusions with autobiographical data and reports of participant observers. His method can be called the method of exemplification, by which evidence of meaningful experiences is cumulated in support of a contention until a point is reached when the reader is convinced of the probable validity of the interpretation. The degree of validity achieved by this method depends upon the effectiveness with which the evidence eliminates possible alternative interpretations. Cantril's interpretation possesses a high degree of probability due largely to the fact that he combines a thorough knowledge of human motivation with adequate consideration for sociological factors and the use of significant first-hand material.

The study is timely for it gives a useful orientation on current events. Besides contributing to a better understanding of contemporary movements, it furnishes a fruitful basis for analyzing other movements, and predicting what movements will achieve desired goals.

THEODORE ABEL

Columbia University

Social Psychology of Modern Life. By STEUART HENDERSON BRITT. New York: Farrar & Rinehart, Inc., 1941. Pp. viii+562.

This textbook does not differ greatly from those which followed Kimball Young's 1930 text. Psychology, anchored in the biological organism, draws its "social foundation of behavior" from anthropological field reports.

The biological foundations hardly constitute more than an attempt to say "all about man." In actual analysis of social interaction, these concepts have no explanatory function and are more a *façon de parler* than a means of causal explanation.

One wonders why language is discussed under the heading of "Individual Factors of Social Adjustment" rather than that of "Behavior in the Presence of Others"; and why dominance and prestige is discussed in connection with sex rather than in connection with leadership, social stratification, or political and economic power.

This is certainly not because the author is a Freudian. He does not, however, avoid utilizing Freudian concepts (unconscious mechanisms included), despite the fact that he summarizes his discussion against Freud by stating

in relation to the unconscious that "the nervous system does not disappear from time to time and then suddenly come back into existence, resurrected by a mysterious unconscious." The sociologically oriented Neo-Freudians (Karen Horney, for example) are not discussed. The author prefers the biological reductionism of Watsonian behaviorism to the reductionism of Freud, and even George H. Mead's social behaviorism is left entirely out of account.

Britt does not seek to emphasize "abstract theoretical problems" but this is no excuse for blatant contradiction. His eclecticism blurs heterogeneous frames of reference so that every concept becomes not an analytical tool, but a sponge saturated with variant meanings. The favorite term "conditioning" thus comes to mean anything from "caused" and "determined" to "adjusted" or "conforming."

The impressionistically selected material cuts across many other sciences because the author does not distinguish between that which is psychically relevant, that which is psychically caused, and that which is psychological. The selection of topics and materials follows, therefore, a general drift rather than a conscious method. It is a purely fortuitous outcome if the psychological aspect of the problem is finally formulated.

This encyclopedic pluralism is especially prominent in the attempt at analysis. One wonders why the author wishes to state all necessary conditions rather than those which would adequately satisfy our search for causal explanation. Necessary conditions are infinite!

Catalogues of concepts are quoted in varying completeness as causal explanations. Thus W. I. Thomas's four wishes, Pavlov's conditioned response, Freud's concepts, and echoes of Tarde and LeBon come to rest harmoniously together. For with increasing historic "distance" even dissonances tend to blend harmoniously.

The presentation of this varied and industriously collected material is accompanied by photographic puzzles and illustrations. But could any audience familiar with the magazine *Life* learn anything from them? Moreover, the aim at popularity, the eagerness to conform and to make overly-adaptable evaluations (such as to suggest the substitution of Henry Ford and other success lore for the folklore of Santa Claus), takes the scientist rather far afield. It may be wise for the teacher to entertain, but not to play to the gallery.

H. H. GERTH

University of Wisconsin

The Center, the Group under Observation, Sources of Information, and Studies in Progress. By HAROLD C. STUART and Staff of the Center for Research in Child Health and Development, School of Public Health, Harvard University. Monographs of the Society for Research in Child Development, Vol. IV, No. 1 (Serial No. 20). Washington: Society for Research in Child Development, 1939. Pp. xiv+261. \$1.75.

The Influence of Nursery School Experience on Children's Social Adjustment. By ARTHUR T. JERSILD and MARY D. FITE. Child Development Mono-

graphs No. 25. New York: Bureau of Publications. Teachers College, Columbia University, 1939. Pp. xi+112. \$1.60.

Child Psychology: An Annotated Bibliography. By FLOYD HARDIN, EULALIA DOUGHERTY CHAPMAN, and LETHA BELLE HILL. Denver: Denver Public Library and the Colorado Department of Education, 1938. Pp. unnumbered.

Parent Education: A Survey of the Minnesota Program. By EDITH A. DAVIS and ESTHER MCGINNIS. Child Welfare Monograph Series, No. 17. Minneapolis: University of Minnesota Press, 1939. Pp. x+153. \$2.50.

The first title of this group is a monograph from the Center for Research in Child Health and Development of the Harvard University School of Public Health and the first one hundred pages are devoted to the objectives and organization of the center, and a description of its program of research with an exposition of the kinds of data which are being collected in the studies in progress. The kind of data collected is about what one would expect of a research center which operates from the point of view of pediatrics but aspires to coordinate a wide range of biological skills in the analysis of the central problem of human development and its relation to child health. Perhaps the feature of this part of the monograph which will astonish the sociologist is its complete lack of understanding of what is sociological in the attempt to incorporate into the study "sociological observations." The second half of the monograph is given over to a presentation of the finding upon two sisters and their families. This section presents detailed factual observations concerning the physiological development of the children in the two families, with some background of what is currently regarded as social history and a somewhat restricted use of psychological measurements.

The monograph by Jersild and Fite is a study of eighteen children who were in the three-year-old nursery school group during a year at the Child Development Institute of Teachers College. The purpose of the study was to determine the influence of the nursery school experience upon the child's behavior as it found expression in his adjustment to the nursery school environment in general and to the other children of the group in particular. The observations of the behavior of these eighteen children is about what anyone would see who had the patience to observe a group of children of this age for the periods under observation, which consisted of ten fifteen-minute periods per child in the autumn and eight five-minute periods in the spring. In general, the findings indicate that children become more sociable as a consequence of group experience and the more they are thrown together into a constant social grouping the greater the tendency toward delimiting contacts to members of that group. He who finds manna in the desert is welcome to it!

Davis and McGinnis have attempted to give both an account of the operation of the parent education program of the University of Minnesota from 1925 to 1932 and to determine the effects of this program upon parental attitudes toward children's behavior. It is this latter aspect (although it occurs first in the monograph) which is most significant and to which this

review will be restricted. Persons, mostly women, were asked at the first and last meetings of the parent education classes to rate a series of behavior patterns as of no importance, slight importance, considerable importance, and of extremely great importance. Only the patterns rated of considerable and of extremely great importance, were considered in determining changes in attitudes. Roughly, five thousand replies were received and of these about one-fourth were at both the first and last meetings. The remainder were divided approximately equally between persons attending the first meeting and not the last, and those who attended the last meeting but not the first. In general, it was found that the same problems were considered more serious in older children than younger, more serious in girls than in boys, except that with reference to neurotic behavior the reverse was found. Nearly all problems were rated as less serious after than before instruction, but greater changes were found in the urban than the rural group. Also greater change took place when the teacher was an outsider than a member of the community. Mothers with little education were inclined to rate patterns more seriously than those who had more education and to change more after the instruction period. The analysis makes the implicit assumption that changes in the replies at the final meeting as compared with the first, represented effects of the instruction. In view of the fact that changes on the whole were not great, and in accord with the common experience of teachers of the social sciences, this assumption would seem justified.

The annotated bibliography by Hardin, Chapman, and Hill is in hectograph form and was compiled as a Works Progress Administration project. Annotations are from reviews and abstracts published in both the popular and scientific periodicals and are uneven in character, some being wholly descriptive of the contents of the work and others almost wholly evaluative. Wherever the annotations are evaluative, they are invariably laudatory in their praise and the authors seem to have looked for the more extravagant, much as do publishers for the blurbs which they print upon the jackets of their books. The consequence is that the annotations are of little use in a large proportion of the references and the bibliography itself is incomplete. For those who have a thirst for reading reviews, references appear following each annotation.

ERNEST R. MOWRER

Northwestern University

Psychiatric Social Work. By LOIS M. FRENCH. New York: The Commonwealth Fund, 1940. Pp. xiii + 344. \$2.25.

This book affords a generous bird's-eye view of the origin, functions, and field of psychiatric social work. It is the result of several years' investigation, financed in part by The Commonwealth Fund and conducted under the supervision of the American Association of Psychiatric Social Workers (AAPSW).

The author begins by outlining the functions of the psychiatric social worker: (1) analysis of the patient's social situation based on a study of his home, family, and neighborhood, and his attitude toward them and toward

his illness; (2) interpretation to the family of the patient's problem and the recommendations made by the psychiatrist; (3) aid to the patient and family in working out a program for a more adequate social adjustment, and cooperating with the psychiatrist as the treatment progresses; and (4) interpreting the diagnosis and plans for treatment to the client and family. These four functions are obviously interrelated.

This is followed by a detailed historical account of the origin and growth of psychiatric social work, the application of this service in hospitals, clinics, educational institutions, and other public agencies, and the formation of the AAPSW. Subsequent sections contain analyses of the number of workers, requirements for professional training, organized courses of study, analysis of curricula, opportunities for placement, the turnover of workers, and the range of salaries. There is a discussion of the practical services rendered by the psychiatric social worker in hospitals for mental disease, child guidance clinics, psychiatric and mental hygiene clinics, educational institutions, and public health nursing. The duties of the worker in relation to the historical development of the field and changing concepts such as shift of emphasis of technique and the development of case work is well presented. There is appended a history and by-laws of the AAPSW and a table showing the salaries which range from less than one thousand dollars to more than five thousand dollars per annum.

As the field of psychiatric social work has developed there has grown a need for a comprehensive presentation to students (and professional people) of the historical development of the field, the nature of services rendered, sources of training, possibilities for placement, and other equally important information. This book fulfills the need. It is a good source book containing data critically selected and well presented.

JOSEPH PESSIN

University of Wisconsin

Prostitutes: Their Early Lives. By the Advisory Committee on Social Questions of the League of Nations. Geneva: Publications Department of the League of Nations, 1938. Pp. 140. \$0.75.

The Married Woman: A Practical Guide to Happy Marriage. By GLADYS H. GROVES and ROBERT A. ROSS. New York: Blue Ribbon Books, Inc., 1939. Pp. 278.

Marriages Are Not Made in Heaven. By JANET FOWLER NELSON. New York: The Womans Press, 1939. Pp. 158. \$1.25.

The Good Housekeeping Marriage Book: Twelve Ways to a Happy Marriage. Ed. by HELEN JUDY BOND. New York: Prentice-Hall, Inc., 1938. Pp. 173. \$1.96.

Harmony in Marriage. By LELAND FOSTER WOOD. New York: Round Table Press, Inc., 1939. Pp. 122. \$1.00.

Getting Ready to be a Father. By HAZEL CORBIN. New York: The Macmillan Co., Pp. 48. \$1.25.

The Family Meets the Depression: A Study of a Group of Highly Selected Families. By WINONA L. MORGAN. Minneapolis: The University of Minnesota Press, 1939. Pp. 126. \$2.00.

The Basis of Israelite Marriage. By MILLAR BURROWS. American Oriental Series, vol. 15. New Haven (Conn.): American Oriental Society, 1938. Pp. 72.

Prostitutes: Their Early Lives is a part of a study in the rehabilitation of prostitutes undertaken by the League of Nations' Advisory Committee on Social Questions and is based upon questionnaires sent to fifteen governments and to six voluntary associations. The data in the 2659 returned questionnaires were supplied from the records of the organizations solicited. Each organization was asked to return data upon fifty prostitutes, taken in consecutive order from the records. The number returned, however, varied considerably and there was evidence in some instances that the "most interesting" or those upon which the greatest amount of data were available were selected. The Committee concludes upon the basis of incomplete and unevenly reported data that there are many diverse causes of prostitution of which the mentality and temperament of the individual is the most powerful predisposing element, a large proportion of the women being either mentally subnormal or abnormal. In both the normal and subnormal groups, many women possessed traits likely to cause unhappiness and failure; restlessness, lack of self-confidence, lack of affection, introversion, defiance and irascibility. One third had had an unhappy childhood, many were orphans or illegitimate. Few had been satisfied or successful in their employment and few had had vocational training. A third of the women had married, mostly before becoming prostitutes, and scarcely any of the marriages had been successful. Many showed the characteristics of laziness and love for luxury. Only a few had come from extremely poor homes; the great majority, however, had working-class parents. Employment itself often operated as a predisposing cause in that over half the women had started their working careers in some kind of domestic service. Poverty was given most frequently by the women themselves as the cause of their prostitution; a few asserted they had been forced or seduced into the profession. Far more, however, attributed their choice to the desire to achieve the luxury and easy life of their prostitute friends. Thus there is little in this report which is not already generally known and the prostitute continues as much a mystery as before since all the things which are attributed to the prostitute are common to many non-prostitutes.

The Married Woman represents an honest attempt to prepare the modern woman for marriage relations and for the problems which arise therein. The authors have put into readable language the knowledge which is available from a wide range of research and coordinated this into a practical program of instruction. If it has any deficiencies these grow out of the desire upon the part of the authors to be both frank and yet not offend the most sensitive dispositions. If those who upon reading the book find at times suggestions of "What Every Woman Should Know" in the tone of presentation will take this desire into account, the virtue of a popular treatise will counterbalance at least in part the sins of euphemism.

Marriages Are Not Made in Heaven was written as a guide to be used in discussion classes of girls in the Y.W.C.A. program of education for marriage. Outside of two diagrams showing the median sections of the male and female reproductive systems taken from the work of Doctor Robert L. Dickinson, the guide has little to recommend it and supplies further evidence to the wisdom of that ancient adage, "A little knowledge is a dangerous thing."

The Good Housekeeping Marriage Book is a reprint of a series of articles which had previously appeared in the Good Housekeeping magazine. The several chapters are about what one would expect in a magazine of this sort in which the primary determination of the choice of the author is his prestige, whether or not it happens to be in the field in which he is writing. The consequence is that Ellsworth Huntington becomes the expert on advising whether one ought or ought not to marry; William Lyon Phelps writes on religion in the home. Chapters by well-known writers in the field of the family resemble skim-milk at best, and in one instance results in a recipe for marital happiness consisting of ten steps.

Harmony in Marriage is a homily on marriage by the secretary of the Committee on Marriage and the Home of the Federal Council of the Churches of Christ in America. It is doubtful if any couple carefully reading its pages will be either more or less happy in marriage as a consequence.

Getting Ready to be a Father is a sentimental handling of the important problem colloquially designated in the title. It sketches the process of embryonic development, advises how to obtain competent professional services for the mother, discusses furnishing the nursery, and gives elementary instruction on the care of the baby. The advice is sound enough if one can weather the bromides and has never gone beyond the third grade in school.

The Family Meets the Depression is chiefly a statistical comparison of data obtained through the use of questionnaires from 331 families in 1927 and 1933. The questions asked concerned the economic status of the families; the management of the household; health; social, recreational, and cultural activities; and family relationships. In the analysis of family relationships, greater use has been made of qualitative materials than in the other sections and as a consequence this part of the report becomes more impressionistic. Where quantitative comparisons are made, constant use of the standard error prevents hasty conclusions. An interesting feature of the study is the comparison of replies obtained to the same questions through the questionnaire and the personal interview. Questions of fact yielded comparatively high agreement; whereas those involving judgments showed such high disagreement as to raise serious doubts about the value of the answers. In general, this group of families seem to have been relatively little affected by the depression. The explanation offered by the author is that most of the men were college graduates and most of the women had had home economics training.

In *The Basis of Israelite Marriage* the author examines the evidence regarding the practice of the Hebrew bridegroom giving to the father of the bride a sum of money or of goods in the light of several explanations: bride-purchase, price of children, remuneration for the expense involved in bring-

ing up the girl, compensation for the loss of virginity, provision for widowhood or divorce, security for fulfillment of contract, compensation-gift, and concludes that the latter more nearly fits the facts. The author's thesis that in the marriage transaction of the early Hebrew there was a fusion of compensation and gift in which a valuable present (the bride-price) was given in return for a precious possession (the bride) seems to be well taken since much of exchange under close primary conditions tends to take on the characteristics of exchanging gifts.

ERNEST R. MOWRER

Northwestern University

The Modern Method of Birth Control. By THURSTON SCOTT WELTON. New York: Walter J. Black, Inc., 1938. Pp. xi+159. \$2.00.

Parenthood: Design or Accident? A Manual of Birth-Control. By MICHAEL FIELDING (pseud.). New York: The Vanguard Press, 1938. Pp. 239. \$2.50.

These two manuals of birth control present the divergent methods of "mechanical" contraception and of restriction of sexual intercourse to the "safe" period of the menstrual cycle. Welton's manual presents a fervent plea for the "rhythmic" method, describing the process of conception in the simplest language and in accordance with the tenets of Ogino and Knaus. He then presents a series of charts for regular and irregular periods of various lengths and an ingenious calender wheel which when superimposed upon the proper chart readily indicates the specific dates of the "safe" period following a particular menstruation.

Fielding's manual presents in restrained language the case for the use of the mechanical (including chemical) methods of contraception without claim to their infallibility. The methods are described in detail, and their respective virtues and limitations are pointed out. This is followed by a discussion of the methods of the future, reviewing the experimental work which is being done in the hope of developing better methods of contraception. The book also contains a scholarly discussion of the "Ogino-Knaus" theory, a glossary of terms and a list of birth-control clinics in the United States. Although not intended as such, Fielding's manual serves as a wholesome antidote for Welton's. How Doctor Welton, a medical man, can completely ignore the evidence showing the fertility of at least that part of the "safe" period following the beginning of menstruation, which is perhaps the most fertile of all periods, is beyond the comprehension of this reviewer.

ERNEST R. MOWRER

Northwestern University

Controlled Fertility. An Evaluation of Clinic Service. By REGINE K. STIX, M.D., and FRANK W. NOTESTEIN, Ph.D. Baltimore: Williams & Wilkins, 1940. Pp. xiv+201. \$3.00.

This is one of the most important studies of clinical contraception ever published. It is based upon complete histories obtained from 991 Bronx

women who attended the Sanger Bureau. The conclusions, arrived at by refined statistical analysis of clinical records and data gathered by Dr. Stix, a physician, during home visits, are sometimes startling and always reliable.

No brief review can do justice to such an important contribution to knowledge. But here are a few of the conclusions selected at random: (1) "Folk" contraceptive practices (untutored efforts) adopted prior to a clinical visit were 79 percent effective (p. 58). The number of pregnancies per year of married life was reduced about 55 per cent in the pre-clinic experience (p. 59). (2) Male sheaths, as some of us have long suspected, are about as reliable as the diaphragm technique taught in the clinics. The authors urge the clinics to rely less upon one method; to pay more attention to the acceptability of the method prescribed and less to its absolute reliability. (3) Only 43 percent of those interviewed were using any part of the clinic prescription at the time of Dr. Stix's visit less than two years after clinical advice (we reported similar experience on a London series in 1929); while only 37 percent were using the chief clinic method exclusively and continuously. A few had made modifications in it or were alternating its use with their habitual method. (4) There is statistical demonstration here of a point long suspected by the reviewer, namely, that Catholics practice less reliable methods prior to a clinical visit and adopt them later in the life cycle than Protestants or Jews. With pre-clinical methods the pregnancy waste for Catholics was twice as high as that for Jewish couples, and more than a third higher than that of Protestants and others.

There is further proof here that modern methods do not cause sterility. When women gave up contraception, 54 percent conceived within a month, nearly 80 percent within three months (pp. 67-68).

A concluding chapter discusses the relations between birth control and population trends. While the point of view here is essentially sound, it has in spots a touch of intellectual hauteur and an uncritical acceptance of the notion that we are in for a "permanent decline" in population (p. 157). Who, pray, is in a position to talk about a permanent increase or decline in anything? It is not suggested that the authors are extreme in their position on this point. They have simply followed a fad and fallen into a fallacy of extrapolation.

There are 56 tables and 16 illustrations, a rather good bibliography, and brief index. Various appendices present the master tables and explain in detail the methods used.

NORMAN E. HIMES

Colgate University

The Long Week End: A Social History of Great Britain, 1918-1939. By ROBERT GRAVES and ALAN HODGE. New York: The Macmillan Company, 1941. Pp. xii+455. \$3.00.

"The more newspapers people read, the shorter grows their historical memory; yet most people read little else." It is thus regrettable that so few books do so well the useful task Graves and Hodge assigned themselves.

Records of other centuries and of other cultures have their significance, but these authors demonstrate how much we can so soon forget of our own immediate past and how useful it would be to remember more detail more vividly.

The note on which the story begins is portrayed in these sentences:

The problem that now faced the Government, local authorities, and what were conveniently known as "vested interests," was how to smother the threat of social revolution which the Fighting Forces constituted. The time-honoured solution was to soothe them with handsome promises until they were safely demobilized, meanwhile depicting the dangers and penalties of revolt in the most horrid colours.

The details of the "Khaki Election," in which few men in khaki voted, demobilization, and the "dole" follow.

The book is reportorial, impressionistic, suggestive. It is not and was not meant to be a sociological analysis. It is, as the authors assert, "a reliable record of what took place, of a forgettable sort, during the twenty-one-year interval between two great European wars."

Graves and Hodge end their book on much the same note on which it begins. Chamberlain had just announced over the BBC., "I have to tell you that . . . this country is at war with Germany." And then the author concludes with:

But the country was still sound at heart, the staunch Conservatives felt, as they hurried on, a few minutes late, to Sunday service; and the social revolution, so long averted, would now be made altogether impossible by a new and sterner DORA. Besides, Britain always won the last battle.

The Left did not know what to feel or where to go. They were left staring rather stupidly at the knobs of their radio-sets. Chamberlain had faced up to Hitlerism at last; but was this exactly what they had meant?

Fifteen pages of index and (despite a lack of footnotes) fairly adequate but not burdensome references to sources in the text provide the book with workmanlike mechanics.

ALFRED MCCLUNG LEE.

*Institute for Propaganda Analysis
and
New York University*

Die Bibliothek des Instituts für Weltwirtschaft: Voraussetzungen und Grundlagen weltwirtschaftlicher Forschung. By WILHELM GUELICH. Jena: Gustav Fischer, 1939. Pp. 87.

This is a survey of one of the best social science libraries on the European Continent: the library of the social science institute at Kiel University.

In addition to the internationally standard literature in the various fields, it collects subsidiary materials ranging from illustrative fiction to pamphlets. Special emphasis is placed on materials put out by governmental and consular authorities all over the world. It contains the reports of corporations, of economic and social agencies of all sorts. Altogether there are about three hundred fifty thousand volumes in the stacks, and eighteen thousand periodical publications, ten thousand of which were received currently be-

fore the present war began. Tabulations and analyses furnish a picture of the development of the library, the regions covered, the sources of the material according to various breakdowns.

The catalogue work deserves special emphasis. It is unique. Besides the usual alphabetical catalogues of authors and titles, regions and countries, there is a special catalogue of corporate bodies, conferences, societies, and foundations. It lists all publications and all the material dealing with them. The catalogue is ideal for comprehensive studies of pressure groups, their interests, ideologies, and promotive activities. Another catalogue organizes the material according to personalities. E.g., under "Schumpeter" one will find not only all his publications (articles as well as books), but also references to forewords which he wrote, to his editorship of periodicals, and all secondary materials concerning him and his work, whether the titles directly bear upon him or not.

The catalogue work culminates in a general subject-matter catalogue which aims at avoiding the atomization and segregation of intellectually coherent materials, a shortcoming which is unavoidable in the alphabetized usual catalogues.

By an ingenious combination of historical, spatial, and logical dimensions, Guelich succeeds in articulating coherent problem complexes. At the same time the catalogue gives integrated and specialized bibliographic guides. Magazine articles are included, and the content of a book and its bearing on a variety of subjects is subsumed under all pertinent headings. Two hundred entries per day is the average for the last fourteen years, and the entire library is run by a staff of not more than fifty.

The whole system is extremely elastic and adjustable to new problems. The numerous cross-references which constantly accumulate provide for an unusually rich opening up of the available literature, a task which ordinarily is left to the ingenuity and industry of each individual researcher. The technical organization of the library as such is equally unique, a model of detailed planning which results in streamlined efficiency. It is no accident: Guelich is an economist turned librarian.

H. H. GERTH

University of Wisconsin

A Federation for Western Europe. By W. IVOR JENNINGS. New York: The Macmillan Company. 1940. Pp. xi+208. \$2.50.

An Englishman writing, in 1940, a volume which contains general plans for "A Federation for Western Europe" evidences either (1) sheer bravado in the face of the menacing enemy, (2) a nice propagandist sense in preparing for a later war stage when Federalism might render stalwart service to the Allied cause by convincing Germans and the subject peoples that law and order could reign in Europe under Federalism, (3) unrealistic daydreaming and wishful thinking as escape from gruelling national strain, or (4) a sincere belief that Federalism for Western Europe is feasible. From a perusal of Jennings' volume, from his statements in the Preface regarding his extended association with the Federal Union group, and from the fact that he

is Reader in English Law in the University of London and is a Barrister-at-Law, I choose to believe that he is of the fourth type and is a sincere advocate. There are probably no insuperable legal obstacles to a Federation for Western Europe.

Mr. Jennings states that his "purpose is to provide a basis for wide, unofficial discussion." He has done so, if the discussion is to be conducted by groups of intelligent laymen and not by specialists clamoring for details. His generalizations are precise and clear. After eleven chapters of discussion of the purposes of federation, the political forms of the constituent states, the type of federal government, and the questions of defense, foreign policy, the judicial settlement of disputes, and a European economy, he provides (pp. 169-200) a rough draft of a proposed constitution for a federation of Western Europe.

At the very minimum, such schemes would have value in persuading readers that certain aspects of the older nationalism are obsolescent. In addition the reader will find this book useful in organizing his own arguments for and objections to, plans of "federal union," "union now," "union with Great Britain," and other varieties of union from regional systems to world systems. If the book is thus useful to the reader, the author will have achieved his immediate purpose.

I do not propose to attempt a criticism of this plan of Federation or to enumerate the principal types of obstacles to the achievement of such federation. Differences in political forms and ideologies, and the considerable differences in the economic levels of the various states would hardly make such a plan acceptable to those with vested political and economic interests. However, in the Europe of 1945, in which millions now living will be dead of violence and many more millions exterminated by starvation and disease, in which political and economic vested interests are greatly depleted, the desperate, exhausted, starving populations, urged from without, may consider that a plan for a "Federation for Western Europe" has more qualities of a blueprint and less of a dream. Under such conditions of acceptance, political utopia would not necessarily have arrived.

University of Illinois

WILLIAM ALBIG

BOOK NOTES

Bibliography of Jewish Social Studies. By SALO WITTMAYER BARON. New York: New York Conference on Jewish Relations, 1941. Pp. iv + 291. \$3.00.

This is an extensive list of books, pamphlets, and articles in various languages. The author's careful classification and frequent annotations conduce to the practicability of the bibliography.

Organized Anti-Semitism in America. By DONALD S. STRONG. Washington, D. C.: American Council on Public Affairs, 1941. Pp. iv + 191. \$2.50.

This is an effort to throw light on the growth of fascism in the United States as reflected in anti-semitic movements and organizations. The author is interested in anti-semitism only when it is associated with an anti-revolutionary ideology. Leadership, propaganda content and method, and membership of the various organizations are examined. Except for brief prefatory notes concerning the nature of anti-semitism and of revolutionary movements, the work is descriptive, not analytic.

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The Literature of Adult Education. By RALPH A. BEALS and LEON BRODY. New York: American Association for Adult Education, 1941. Pp. xvii+493.

A polite testimonial, albeit unwitting, to the weakness and confusion in the mass (or mess) of activities called adult education. Very little is said about critical literature.

The Philosophy of Peirce—Selected Writings. Edited by JUSTUS BUCHLER. New York: Harcourt, Brace, and Company, 1940. Pp. xvi+386. \$3.50.

One of the chief lines of possible research in that loosely defined but important field known as sociology of knowledge might be the task of accounting for fluctuations in the influence of various thinkers. Just now, for example, an interesting shift in the attention of pragmatists is going on—indeed, has been under way for at least a decade. Where William James was once the pragmatist, it seems clear that Dewey had crowded him out by the beginning of the 1930's. Since then, however, the star of Charles Sanders Peirce has been in the ascendant; no genuinely "modern" pragmatist will waste his breath in the discussion of the lesser lights. Perhaps this is as it should be, but in any case, the reviewer may be permitted to register the irrelevant remark that the change has been from clarity to haziness to obscurity, whatever else may characterize it. But it should also be said that Peirce's profundity is in part responsible for his obscurity, whereas in Dewey's case the haziness is congenital, having little to do with the actual complexity of the thought to be communicated.

Making of the Modern Mind. Revised Edition. By JOHN HERMAN RANDALL, JR. Cambridge: Houghton Mifflin Co., 1940. Pp. xii+696. \$3.60.

For some fifteen years this book, in its first edition, has been one of the mainstays in social science courses of many descriptions. In its revised form there can be little doubt that its popularity will continue, particularly among historians, but it will probably never regain its earlier popularity. This is in part because the revision was not carried through with sufficient energy. For example, what is said about "the schools of sociology" (pp. 519-520) is ludicrously inadequate. This is the more regrettable because Randall might be a major contributor to sociology of knowledge if he were sufficiently flexible. As it is, new developments must find new leaders.

The Ancient Greeks. By WILLIAM KELLY PRENTICE. Princeton: Princeton University Press, 1940. Pp. viii+254. \$3.00.

Considering the present state of the world, it seems highly unlikely that Eduard Meyers' *Geschichte des Altertums* will ever be translated. It therefore seems fortunate that Prentice, initially trained by Meyers, has remained so faithful to the "old master," for here within brief compass are set forth many of the major hypotheses and conclusions to be found in the *Geschichte des Altertums*.

The Economics of Ancient Greece. By H. MICHELL. New York: The Macmillan Company; Cambridge, England: at The University Press, 1940. Pp. 415. \$4.00.

Although one misses the incisive formulations of a Hasebroek or a Glotz, there can be no doubt that Michell's book represents the best collection of information about the economics of ancient Greece thus far available in convenient form. One may perhaps quarrel with the somewhat disjointed character of the presentation, but the ore has at least been piled in the heap and one can do one's own smelting.

Greek Popular Religion. By MARTIN P. NILSSON. New York: Columbia University Press, 1940. Pp. xvii+166. \$2.50.

Analyses of the secularization of Greek mentality, a process which accelerated in the middle of the 5th century B.C., have flagrantly taken no account of Greek popular religion. Undenially the Athenian elite, partly sharing an Ionic ideology, were notably secularized. Examples are numerous and striking. We should know by this time, however, that not all strata of society undergo change at the same time, and that therefore "enlightenment" and "superstition

may exist side by side. Nilsson drives home his point with perhaps unnecessary persistence; one visualizes a good deal of finger-shaking in the direction of Gilbert Murray. Most of us will grant Nilsson's contentions without a qualm, but will feel that he is hardly the first to set them forth.

The Agrarian Life of the Middle Ages. Vol. I of the Cambridge Economic History of Europe. Edited by J. H. CLAPHAM and EILEEN POWER. Cambridge (England): The Macmillan Co., 1941. Pp. xvii + 650. \$7.50.

English Villagers of the Thirteenth Century. By GEORGE CASPAR HOMANS. Cambridge: Harvard University Press, 1941. Pp. xiv + 478. \$4.50.

These two books stand in marked contrast. The volume edited by Clapham and Power, for all its erudition and precision, is still orthodox economic history. The justification for it lies in the international division of labor which makes it so rich and varied. (Unfortunately, the preface makes plain the fact that such collaborative effort, as one might imagine, has come to an end so far as volumes II and III are concerned.) All those who want to tread the accustomed pathways with assurance that they are going in the right direction can do no better than use *The Agrarian Life of the Middle Ages* as a guidebook.

English Villagers of the Thirteenth Century is certainly detailed enough, but it gives clear evidence of orientation along carefully chosen lines of method. Chapters such as "Woodland and Champion," "The Family in Champion County," "The Sorts and Conditions of Men," and "The Anatomy of Society" indicate that the focus is not genetic or chronological; "the search for essentials" and "the quest for comparabilities" characterize the effort. Homans, the author, gives witness of his sociological training. Parenthetically, it should be noted that his training seems to have been chiefly in Henderson's version of Pareto, and the reviewer for one must say that if all Henderson-trained men write books like this, the curse of the residues and derivations will be lifted. Moreover, Homans has provided a splendid book for the enlightenment of the rural sociologist; instead of cherishing the pathetic hope that study of the Hopi and the Navaho will give the sought-for clew, the analyst of rural life may decide to examine the immediate antecedents of the culture patterns within which he still lives and works. It is difficult to speak too warmly of *English Villagers of the Thirteenth Century*.

The Works of Gerrard Winstanley. Edited by GEORGE H. SABINE. Ithaca, New York: Cornell University Press, 1941. Pp. v + 686. \$5.00.

The Diggers do not all hail from California. It might be well to disabuse the student on this head by referring to the works of Gerrard Winstanley, the leader of the English sect with the Indian-sounding name. Joking aside, it is high time that the sociology of religion and the history of social thought take account of this exceedingly important lower class movement, crudely communistic in doctrine, which made so much trouble for Cromwell. The volume under review will find a place in every reference library of any significance, for it makes accessible materials which have hitherto been almost impossible to examine.

Darwin, Marx, Wagner. By JACQUES BARZUN. Boston: Little, Brown and Company. Pp. xii + 420. 1941.

Popular in a good sense, and showing evidence of reasonable familiarity with the relevant literature, this book is worth reading by all those who occasionally reflect on the immediate antecedents of twentieth-century shibboleths in vulgarized biology, sociology, and aesthetics.


Milton in the Puritan Revolution. By DON M. WOLFE. Thomas Nelson and Sons. Pp. xiv + 496. 1941.

Prime meat for reference in classes of many kinds—all the way from "What Milton Saw in Paradise" to the history of divorce.

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